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BEAUTIES

OF THE

STUDIES

OF

NATURE:

SELECTED

From the Works of

SAINT PIERRE.

Here hills and vales, the woodland and the plain,
Here earth and water seem to strive again;
Not, chaos-like, together crush'd and bruis'd,
But, as the world, harmoniously confus'd:
Where order in variety we see,
And where, though all things differ, all agree.

POPE.

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REPRODUCED

PREFACE.

In presenting this volume to the American public, we have flattered ourselves with a hope that it will help to spread abroad the writings of an amiable and interesting philosopher, in which are concentrated, we believe, the principles of all knowledge, all consolation, and all happiness.

It should not be understood that the passages here selected have been chosen as the only *Beauties of Saint Pierre.* To some the perusal of the whole of the works of this author might appear as an undertaking of too much magnitude for completion; and few will begin that which they do not expect to finish. In this point of view, we persuade ourselves that the present volume may do some service. A selection like this should, however, be considered rather as an invitation to the entertainment, than as an attempt to satisfy the guests. We shall call ourselves successful, when the reader is induced by the samples here collected, to resort himself to the stores from

whence they are brought, and much more so when, still unsatisfied, he lays down *Saint Pierre* to study the creation itself; writings are but imperfect copies. What additional value shall we ascribe to these fruits, and to these novelties, if we find them to be the fairest productions of science, of taste, and of virtue? The *Studies of Saint Pierre* do not need our eulogium. Europe has admired them. Every enlightened part of the world has paid to them its tribute of applause. What is better still, they have informed the ignorant, and comforted the unhappy! We shall extract the character bestowed upon them by Dr. Hunter, in his preface to a translation of these *Studies*, with which he has favoured the English public.

" What work of science displays a more sub-
" lime theology, inculcates a purer morality, or
" breathes a more expansive philanthropy? *Saint*
" *Pierre* has enabled me to contemplate the uni-
" verse with other eyes; has established, beyond
" the power of contradiction, the doctrine of an
" universal Providence; has excited a warmer in-
" terest in favour of suffering humanity, and
" has disclosed sources, unknown before, of mo-
" ral and intellectual enjoyment. Unfettered by
" system, unawed by authority, he looks imme-
" diately into NATURE; he obſerves, he thinks,

" he reasons for himself, and teaches his reader " thus to observe, think and reaſon."

Saint Pierre has discovered a new path in the paradise of nature; there was no danger, therefore, in making a selection from this invaluable work, of repeating "oft told tales:" His taste embellishes the moſt trivial observation, and his purity renders it interesting; its importance forces us to read it; and the sublime simplicity of its style renders it easily understood. Nevertheless, we have not culled at random. We have gathered such observations as may be usefully perused independently of previous study. We should all study for ourselves, and not become habituated to depend upon others for our very thoughts. Books may supply leading principles; but it is ourselves that muſt apply them . . . Those reap little benefit from reading, who spend their time in travelling post through volumes, perpetually indebted to the author for their ſmiles, their raptures, and their tears. The longest life, and the moſt unremitted attention, will only enable us to catch the smallest glimpse of some small part of the paradise of nature, and to make a few notes; and these scrawled in such a way that, scarce any but oneself can understand them. A writer is able to express only a little part of what he feels, and even that little is seldom understood.

The pleasures of the mind consist of ideas too delicate to be imparted or received . . . Those happy expressions which have acquired particular-reputation, are such as, by a combination of words for which art can supply no rules, have chanced to retain, in a more than ordinary degree, that which the feelings suggested. The touch is delicate in the extreme, but if it succeeds, it lasts forever.

We have mentioned these expressions, and their infrequency, only to shew that ordinary pages bear little comparison with the ideas they were intended to delineate; and from this consideration to urge the reader to expect originality within himself, and to study over again even the very objects upon which others have pored; because, though all that he sees may have been seen, it has not been described. Novelty will present itself to every seeker; and we should not believe that the career of human knowledge is at an end; that the roads have been explored to their boundaries, the fields reaped, and the harvests already housed; and that nothing remains for us but to thresh, and winnow, and grind, and boult, what the industrious of old times have sheaved. No age has passed in which the prejudiced, the blind, and the indolent, have not dreamed that

novelty was no more; nor has any age passed in which novelty has not been found to exist,

"Flushed with the bloom of an eternal youth."

The Studies of Nature not only present us with the most delightful novelties, themselves, but shew us, also, the sources of inexhaustible enjoyment. The topics are various, but their object is uniform: it is never obscured, much less forgotten: it is the establishment of this pathetic truth: GOD *is* GOOD.

In this edition some alterations have been made. The *Tale* of PAUL *and* VIRGINIA, with which the American reader is very familiar, has been omitted, and selections, equally elegant, have been substituted; so that this book will have the merit of an entire novelty, to those who are not already in possession of the complete Work.

BEAUTIES

OF THE

STUDIES OF NATURE.

Select Passages.

I.

I REMEMBER that, when I arrived in France, in a ship which was returning from the Indies, as soon as the sailors perfectly distinguished the land of their native country, they became almost entirely incapable of attending to the ship. Some fixed their eyes upon it, incapable of turning them away; others put on their best clothes as if they were immediately to disembark; there were some who stood talking to themselves; and others wept. As we approached, the confusion of their senses increased. Having been absent during several years, they admired incessantly the verdure of the hills, the foliage of the trees, and even the rocks of the shore, covered with sea-weeds and mosses; as if every object was new to them. The spires of the villages in which they were born, which they recognized

among the distant fields, and named one after another, filled them with extacies of joy. But when the vessel entered the port, and they saw upon the quays their friends, their fathers, their mothers, their wives, and their children, who held out their arms, while their eyes were dimmed with tears, and who called them by their names, it was impossible to keep one of them on board: they all leaped ashore, and it was necessary, according to the custom of that port, to hire another set of seamen, to bring the ship to anchor.

What, then, should we do, if we could distinctly see that heavenly country where all whom we have most loved reside? If we were assured by demonstration that another world exists, I persuade myself that, from that moment, every occupation here would cease. All the laborious and vain anxieties of this life would have an end. The passage from one world to the other being within the reach of every man, who would stay in this? But nature has covered the path with obscurity, and placed doubt and apprehensions as centinels.

II.

Complaints have always been made that the unworthy frequently enjoy the gifts of fortune, while the virtuous are destitute. We are often incorrect in our estimate of merit: not so much

that we over rate ourselves, as that we undervalue others; and this results not from injustice, but from ignorance. But virtuous persons are sometimes destitute not only of the blessings of fortune, but of those of Nature: To this, says Saint Pierre, I reply, that their misfortune often turns to their advantage. When the world persecutes them, they are generally driven into some illustrious career. Misfortune is the road to great talents, or, at least, to great virtues, which are far preferable. "It is not in your own pow-
"er," said Marcus Aurelius, "to be a natural
"philosopher, a poet, an orator, or a mathemati-
"cian; but it is in your power to be virtuous,
"which is better than all."

III.

Being at Marly, I walked among the thickets of its magnificent park, to see the groupe of children who are feeding with vine branches and grapes a goat that is represented at play with them. Near this admirable piece of sculpture is a covered pavillion where Louis XV. on fine days, sometimes partook of a collation. As it was showery weather, I entered it for a moment, for shelter. I found three children there, that were much more interesting than the marble children. Two very pretty little girls were employing themselves with much assiduity in gathering from

around the arbor, bundles of dry branches that the winds blow from the trees, which they put into a basket that stood upon the king's table, while a little boy, badly clothed, and very lean, devoured a morsel of bread in a corner. I asked the tallest of these girls who was about eight or nine years of age, what she meant to do with the wood that she was so eagerly collecting?—She replied, "You see, Sir, that little boy there "—he is very miserable! He is sent out all day "long, to gather wood: when he carries home "none, he is beaten: when he picks up some, "the Swiss, at the entrance of the park, deprives "him of it, and uses it himself. He is faint with "hunger, so we have given him our breakfaſt." After answering me thus, she and her companion filled the little basket. They put it upon his back, and ran before their unfortunate friend, to see if he could pass in safety.

IV.

Juicy and refreshing fruits, as those of a red color, are found only in the hot season: others, that are useful during the winter, on account of their substantial mealy contexture, and their oils, as chesnuts and walnuts, remain eatable during a great part of the year: but those which are provided for the accidental wants of mankind, as those of travellers, continue ready at all times. They

are not only covered with hard shells, proper to preserve them; but they are found upon the trees at all seasons, and in every gradation of growth. In India, upon the uninhabited shores of the islands, the cocoa tree bears ten or twelve bunches of cocoas at once; of which some are in bud; others in flower; others are formed; others already full of milk; others perfectly mature. The cocoa is the tree of the seaman.

It is not the mere heat of the tropics which gives this fertility so constant, and so varied; for the fruits of the trees in India, have as in our own climate, peculiar seasons of ripening, after which they are seen no more. I do not know that any other than the cocoa and the banana, are produced throughout the year.

The banana is, in my opinion, the most useful tree in the world; because its fruits serve as food without any preparation, and are of an agreeable taste, and very substantial. It yields a branch, or cluster of sixty, or four score fruits, which ripen all at once; but it puts forth shoots of every height, which produce in continual succession. The progression of fruitage in the cocoa, is in the single tree; and that of the banana in the number of plants. Every where that which is most useful is most common.

The productions of our fields and of our vineyards, present an arrangement that is still more wonderful; for, though the ear of corn has several sides, its grains ripen together by means of the mobility of its stock, which exposes it to every aspect of the sun. The vine does not grow in bush-form, nor in tree-form, but is spread *en espalier*, and though its berries are clustered, their transparency renders them proper to be penetrated entirely by the rays of the sun.—Nature thus obliges men, by the spontaneous maturity of these fruits that are destined for the general sustenance of mankind, to unite, that they may reap together, and enjoy the harvests. We may consider the corn-field and the vineyard as the most powerful bonds of society. Thus Ceres and Bacchus were regarded in old times as the first legislators among mankind. This title is frequently bestowed upon them by the ancient poets.

V.

"At the word, *savage*," says father *du Tertre*, a man replete with taste, good sense and humanity, "the generality of people will figure in "their minds, a species of men that are barbarous, "cruel, inhuman, destitute of reason, deformed, "tall as giants, hairy like bears; in short, rather "as monsters than as rational creatures; though,

" in truth, our savages are only savages in name:
" as the plants and the fruits which nature pro-
" duces in the forests and the deserts; which,
" though we call them savage, or wild, possess
" their true virtues and properties, in full force
" and vigor, which are often corrupted by our
" contrivances, and considerably altered when
" transplanted into our gardens. The savages
" of these islands* are the most contented, the
" happiest, the least vicious, the most sociable,
" the least deformed, and least tormented with
" the maladies of Europe, of any nation in the
" world."

VI.

The natural beauty of the human form is so striking to animals themselves, that to this, principally, we must attribute the empire which he maintains over all the earth: the weak come for refuge under his protection, and the ſtrongeſt tremble before his sight. *Mathiola* relates, that the lark will save herself amid troops of men, when she perceives a bird of prey. This instinct was confirmed to me by a distinguished officer, who one day saw a lark, in this situation, take refuge among a squadron of cavalry, in which he then served; but the soldier of whom she had

* The Antilles, or West India Islands; Jamaica, &c.

asked an asylum, trampled her under his horse's feet; a barbarous action, which drew upon him, with reason, the anger of the best men in the corps.

I myself have seen a stag, pressed by a pack of hounds, implore, in braying, protection from the pity of strangers who were passing; which agrees with *Pliny*'s assertion. I have seen the Indian fowls in farm yards throw themselves at the feet of country people. If we do not frequently see such instances of animal confidence, it is because they are frightened in our own fields by the continual discharge of fowling pieces, and by other cruel persecutions.

We have heard with what familiarity the ape, and the birds approach travellers in the forests of India. I have seen at the Cape of Good Hope, then in the possession of the Dutch, and even at Cape-town itself, the shores of the sea covered with marine birds, who reposed themselves upon the shallops, and other vessels; and, particularly, a large wild pelican who was playing, close to the cuſtom-house, with a great dog whose head, among other antics, she took into her large beak. This sight gave me immediately upon my arrival, a favourable prejudice respecting the happiness of the place, and the benevolence of the people; and I was not mistaken.

But dangerous animals, on the contrary are seized with terror at the sight of man, unless they are forced from their natural habits by extreme necessity. An elephant in Asia suffers himself to be led almost by a little child. The African lion retires roaring, from the hut of the Hottentots; he resigns the land of his ancestors, and seeks a kingdom among forests and rocks that are untraversed by man. The enormous whale, amid his own element, trembles, and flies before the little canoe of the Laplander.

VII.

Every thing in Nature is a series of concatenation. Frequently the most trifling observation leads to the most important discoveries. A little piece of iron, that turns toward the north, guides fleets through the trackless deserts of the ocean; and a reed of an unknown species, cast upon the beach of the Azores, led *Christopher Columbus* to imagine the existence of the American world.

VIII.

I shall remark upon the subject of mines of gold, that they are placed like those of all other metals, not only upon the most elevated parts of continents, but upon icy mountains,

The famous gold mines of Peru, and Chili, are, as is well known, in the Cordeliers, a chain of

mountains that extend along the whole western coast of South America. The gold mines of Mexico are situated in the neighborhood of Mount Saint Martha, which is covered with snow during the whole year. The rivers of Europe that bring down gold dust upon their shores, have their sources in icy mountains. The Po, in Italy, issues from those of Piedmont. But, without leaving France, we may count ten rivers that precipitate gold dust, and which have all of them their origin in icy mountains. Such is the Rhine, from Strasburg to Philipsburg; the Rhone in the Pays de Gex; the Doux in Franche Compte, which have all three their sources in the icy mountains of Switzerland. The Cese, and the Gardon descend from those of the Gevennes. The Ariege, in the Pays de Foix; the Garonne in the vicinity of Toulouse; the Salat, in the county of Conserans; and the rivulets of Ferriet and Benagues, have all their springs in the icy Pyrennees.

This observation may be extended, as I believe, to all the gold mines in the world, even to those of Africa; of which the rivers that bring down gold dust, as the Senegal, descend from the mountains that are called the *Mountains of the Moon*.

IX.

Certain it is that there are points of attraction which renovate the mines of metals. It is by means of those attractive matrices that those mines are inexhaustible, as has been remarked in many places, particularly in the Isle of Elba, situated in the Mediterranean. This little island is altogether an iron mine, from what they had taken, even in the time of *Pliny*, an immense quantity of that metal, without its being perceptible, as he tells us, that it was not in the smallest degree diminished.

X.

There are metals not so highly prized as gold, but much more useful, the elementary attractions of which might, perhaps, procure us very important accommodations.

The peaks of the mountains, and their long crests, are filled with iron, or copper, mixed with a vitreous body, of granite or chrystal, which attract rains and storms, as veritable electric needles. There is not a seaman but has a thousand times observed these peaks, and these crests, covered with a cap of clouds which envelopes them, and frequently hides them entirely, without once suspecting the cause. Our learned, on the other hand, have imagined, from the charts, that these protuberances are the ruins of the primitive earth,

and, having thus settled the matter, they give themselves no trouble respecting their effects upon the present operations of Nature. We should observe that these pyramids, and metallic crests, like iron and copper mines, are always met with in elevated situations, and at the sources of all rivers, of which, by means of these attractions, they are the principal causes. The general inattention to this subject arises from this; seamen observe, but do not reason; and the learned reason, but do not observe. Certainly, if the experience of the one had been joined with the sagacity of the other, prodigious discoveries would have followed.

I am persuaded that, in imitation of Nature, it might be possible to form, with electric stones, artificial fountains that would attract rainy clouds, in parched and dried places, as chains and rods of iron, attract lightning. It is true that princes only could provide for the expence of such vast and useful experiments; but they would preserve their memory for ever. The Pharaohs, who built the pyramids of Egypt, would not have drawn down upon themselves the curses of the people, as *Pliny* relates, for their enormous and useless labors, had they elevated in the sands of Upper Egypt some electric pyramid, that would have formed an artificial fountain. The Arab who

should go to drink there, at this day, would bless their names; whereas, they were unknown, and entirely forgotten, even in the time of the Romans.

XI.

The length of an animal's life is sometimes proportioned to the duration of the vegetables that nourishes it. A number of caterpillars come into life and die with the leaves on which they feed. There are insects that exist only five hours, such as the ephemera. This species of fly, about half the size of the little finger, is produced from a fluviatic worm that is found at the mouths of rivers particularly, on the waters edge, in the mud, where it digs for subsistence. This worm lives three years, and at the end of this period, about Midsummer-day, it changes, almost suddenly, into a fly, which appears in the world at six o'clock in the evening, and dies at eleven at night.

XII.

Though Nature employs an infinity of means she permits man only the end which she proposes. Her works are subjected to rapid destruction; but proofs always exist of the immortal constancy of her designs. It is on that she wishes to fix his heart and his mind. She wishes to render man good and happy, rather than ingenious and great, Every where she weakens necessary evils, and

every where she multiplies even superfluous blessings. Life endures for an whole age; death only an instant. She causes man to behold, during their whole period, the agreeable developements and growth of life; but conceals from him with tender, with maternal precaution, the hasty progress of dissolution.

If an animal dies, if plants rot in a morass, putrid emanations, and reptiles of disgusting figures, forbid us to approach. An infinity of secondary creatures have been created for the very purpose of quickening the decomposition.

XIII.

Nature drives us far from the spectacles and ministers of destruction, and invites us to her harmonies. She has multiplied these harmonies wherever they might be useful to us; and she considers that as useful which delight us. In this benevolent attention to us, she has gone far beyond the laws which she seems to have prescribed to herself, and far beyond what our study of those laws could lead us to expect as necessary consequences. It is thus that dry and barren rocks repeat, by their echoes, the murmurs of the waters, and of the forests; and the smooth surface of the waters, which have neither hills nor forests of their own, represent these, by reflection, in all their colors and their forms.

It is by this unbounded benevolence that the action of the sun is multiplied wherever it is most necessary, and weakened in every place where it would be hurtful. First, the sun is five or six days longer in our northern hemisphere than it is in the southern, because, in ours is contained the greater part of the continents, and of the inhabitants of the world. Its disk appears in our horizon, before it is risen, and after it is set: this, added to the twilight, considerably lengthens our days. The colder it is, the more is this refraction of its rays extended: for this reason, it is greater in the morning than in the evening, in the winter than in summer, and at the commencement of spring than at that of autumn. When the star of day has left us, during night the moon appears, and reflects its light, with variety in its phases, that have connections still unknown, with many species of animals, and particularly fishes, who travel only in the night, at periods which this luminary indicates. The farther the sun retires from either pole, the more are its rays refracted there. But when it has entirely abandoned it, its light is supplied in a most admirable manner. First, the moon by an incomprehensible movement, goes to replace it, and appears perpetually above the horizon, without ever sitting. This was observed in 1596, at

Nova Zembla, by the unfortunate Hollanders, who passed the winter in the seventy-sixth degree of north latitude.

It is in these dreadful climates that Nature has multiplied her resources, that she may bestow on living creatures the blessings of light and heat. The sky is illumined by the *aurora borcalis*, which casts, even to the Zenith, rays of gold colored, white, red and moving light. The poles are more brilliantly decked with stars than any other part of the firmament. The snows which cover the ground shelter a part of the plants, and by their brightness dispel some portion of the darkness of the night. The trees are covered with moss that catches fire from the smallest spark; and the very earth is covered with mosses, especially under the woods, of so great a depth, that I have sunk, oftener than once, to my knees, in those of Russia. To conclude, the animals who live there are covered with fur, which hides their very nails.

But as the cold is, in its turn, a very great blessing in the torrid zone, Nature has employed a thousand methods to increase its power in that zone, and to weaken the light and the heat of of the sun. First, she does not permit there the refractions of the atmosphere. There is scarcely any twilight before the rising, or after the sitting of the sun. Where it is in the zenith, it is veil-

ed with many clouds, which shade the ground, and refresh it by their waters.

XIV.

Dampier, to describe the *banana*, has compared it, when stripped of its thick and five-pannelled skin, to a large sausage; its substance and its color to fresh butter in winter, its taste, a mixture of apple, and of the pear called the *bon chrétien*, or *good christian*, which melts in the mouth, like a marmalade.

XV.

There are flowers, such as the compound, which, being in an horizontal position, and altogether uncovered, behold, like the sun, our horizon, from its rising till its setting; such is the flower of the dandelion. But this has a peculiar method of sheltering itself: it closes when the heat becomes too great. It has been observed to open, in summer, at half past five in the morning, and folds in its petals at nine o'clock. The flower of the garden-lettuce, which is, on the contrary, a vertical plant, opens at seven o'clock, and closes at ten. It was by a series of these observations that, the celebrated Linnæus had formed a botannical time-piece: for he had found plants that opened their flowers every hour of the day, and of the night.

There is cultivated in the king's garden, a species of serpentine aloe, without thorns, whose large and fine flower exhales the odour of vanilla, during the time of its bloom, which is very short. It opens only in the month of July, about five o'clock in the afternoon: you may then see it open, unfold its beauties by little and little, expand them, fade and die. At ten o'clock in the evening, it is totally withered, to the great astonishment of the spectators, who flock to it in crowds; but nothing is admired that is not uncommon. The flower of our common thorn (not the white thorn) is still more curious: for it blooms so rapidly that there is scarce time to observe it.

XVI.

The seeds of thistles, of corn-bottles, of dandelion, of succory, *&c.* have wings, plumes, tufts, and various other means of travelling through the air, which convey them to various distances. Those of the grasses, which likewise travel very far, are provided with chaff and with husks.—Others, such as the yellow gilly flower, are formed into light scales; and these fly with the least breath of wind, and plant themselves in the smallest crevice of a wall. The seeds of the largest trees of the mountains are not less volatile. That of the maple has two membranous pinions, resembling the wings of a fly. That of the elm

is cased within an oval leaf. Those of the cypress are so small as to be almost imperceptible; and are, consequently, easily scattered. Those of the cedar are terminated by broad, thin plates, which, together, form a cone. The seeds are in the centre of the cone; and when they are fully grown, the plates to which they adhere, detach themselves from each other, like cards from a pack, and each flies far away with his own little seed.

XVII.

The seeds of the plants of the mountains that appear too heavy for flying, have other resources. The peas of the balsamine have pods whose elasticity, in bursting, throws them to a great distance. There is in India, a tree, of which I cannot recollect the name, that discharges its seed with a noise that resembles the report of a musquet. Those which have neither tufts, nor wings, nor elastic pods, and which, from their weight, seem condemned to remain at the foot of the vegetable that produces them, are, frequently, the very seeds that travel farthest. They fly with the wings of a bird. It is thus that many berries and nuts are re-sown. Their seeds, being inclosed by stony shells, are indigestible. The birds swallow them, and plant them in the cornices of towers, in the crevices of

rocks, and on the trunks of trees, beyond rivers, and even rocks. It was thus that a bird of Moluccas re-peopled with nutmegs the desert of islands of that Archipelago, in contempt of all the efforts of the Hollanders, who destroy those trees in every place wherein their existence cannot be advantageous to their own commerce.

XVIII.

Nature has placed in the very bosom of the torrid zone, and in its vicinity, chains of icy mountains, which accelerate and redouble the effects of the polar winds, especially along the seas, where fermentation was most to be feared, from the alluvion of the bodies of animals and of vegetables which are continually deposited there. Thus, the chain of Mount Taurus, that is always covered with snow, begins in Africa, upon the burning shores of Zara, and, coasting the Mediterranean, passes into Asia, where it casts forth long branches in various parts, which embrace the gulphs of the Indian ocean. Similarly in America, the long chain of the Cordeliers of Peru and Chili, the elevated ridges of which traversing Brazil, cools the long and burning shores of the South Seas, and of the Gulf of Mexico.

XIX.

These elementary dispositions are only part of the resources of Nature, for temperating the heat

of sultry climates. She, there, shades the ground with creeping vegetables and trees, that are perfect parasols. Some of these, as the cocoa-tree of Sechelle's Islands, and the talipot of Ceylon, have leaves that are from twelve to fifteen feet in length, and from seven to eight in breadth. She there covers the animals with hairless skins; and colors them, in general, like the herbage, with dark and brownish tints, in order to diminish the reflexes of heat and light.

XX.

The great art of exciting emotion consists in opposing material or visible objects, to such as are intellectual, or existing only in the mind. Then it is that the soul takes a daring flight. It passes from the visible to the invisible, and enjoys itself in its own way, if I may use the expression, by extending itself into the vast field of sentiment and of intelligence. Among certain tribes of Tartary, when a great man dies, his groom, after the burial, leads by the bridle the horse which the deceased had been accustomed to ride; he places upon him the clothes of his master, and walks him in silence before the assembly, which, by that spectacle, are melted into tears.

When those circumstances that are to be felt, not expressed, are numerous, and connected with

some virtuous affection, the emotions of the soul redouble. Thus, when, in the Eneid, *Iulus* promises presents to *Nisus* and *Euryalus*, who are going in search of his father at *Palanteum*, he says to *Nisus*:

Bina dabo argento perfecta atque aspera signis
Pocula, deviota genior quæ cepit Arisba;
Et tripodes geminos, auri duo magna talenta,
Cratera antiquum quem dat Sidonia Dido.

Lib. IX.

"I will give you two silver pitchers, with figures " in relief, of excellent sculpture. They became " my father's at the capture of Arisba. I will " add to these, two tripods of the same fashion, " two large talents of gold, and an antique cup " that was given to me by queen Dido."

He promises to these two young men, whom friendship had so united, double presents: two pitchers; two tripods as stands for the pitchers, after the usage of the ancients; two talents of gold to fill them with wine; but only one cup from which both were to drink. Again, what a cup! Of this he boasts neither the material of which it is composed, nor the workmanship that had been bestowed upon it, as he did in the other presents: he attaches to it moral recommendations of much more value to the two friends. It is antique, it is not the prize of violence, but the gift of affection.

Without doubt, *Iulus* received it from *Dido* when she thought to have married *Eneas*.

XXI.

There is a language that seems to appertain more particularly to that first principle of ourselves which we have called *sentiment*: it is *music*. I shall not say much upon the incomprehensible* power which it possesses of calming and exciting the passions in a manner independent of reason, and of creating sublime affections disengaged from all intellectual perception; its effects are sufficiently known. I shall only observe, that it is so natural to man, that the first prayers addressed to Deity, and the first laws of all nations were set to music. Man loses a taste for it only in polished society, the very languages of which lose, at length, their accent. This is because the connections of society destroy the correspondencies of Nature. In society we reason much, but almost cease to feel.†

* The power of music, we may presume, is called incomprehensible because it affects us without the use of words: but sound is as truly the language of the feelings as words are that of the understanding. If this be admitted, the influence of music is not more incomprehensible than any other influence to which the nature of man is subject.

† The prevailing attachment to music seems to contradict the author: but, probably, he denies the reality of the *taste*; that is, he denies that music is *felt* by all who practise or

XXII.

The way in which the Creator has provided for the thirst of man, in sultry places, is worthy no little admiration. He has placed in the burning sands of Africa a plant of which the leaf, turned round like a cruet, always contains a glass full of water: the gullet of this cruet is shut, by the extremity of the leaf itself, so compleatly, that the water cannot evaporate. He has planted upon some sultry spots, in the same country, a large

who praise it. But though it is undoubtedly true that many would addreſs themselves to spinning of platters, were that diversion equally fashionable, it is not to be believed, upon any subject like the present, that the majority are insincere. The love of music is, perhaps, by the beneficence of the Creator, peculiarly infused among a luxurious people, because when every other avenue is shut, this carries nature to their very hearts. And nature is always virtue.

It is obvious that music supersedes, in the present day, every other amusement. In public places, music triumphs, and worthily, over every other consideration. It has destroyed the importance and dignity of the drama; for why should good plays be written, or good acting exhibited, if the most wretched jargon, and the most abject buffoonery, will be accepted for the sake of a few songs and dances, introduced in a manner that disgusts those, at least, who possess general taste? But the stage is evidently decaying; and should the time come when it shall no longer exist, which may, perhaps, be the consequence of absolute refinement, and when concerts be resorted to in its stead, what will there be to regret?

tree, which the negroes call *boa*, of which the trunk monstrously large, is naturally hollowed as a cistern. In the rainy season it is filled with water, which it preserves fresh during the greatest heats, by means of the tufted foliage that crowns its summit. Upon the burning rocks of the Antilles, he has reared vegetable fountains. A *lianne*, called the *water-lianne*, is commonly found there, that is so full of sap that, if you cut a mere branch, a quantity of water will immediately flow, that is quite sufficient for a draught, and is perfectly limpid and pure.

In the swamps of the bay of Campeachy, travellers find other relief: these swamps, on a level with the sea, are almost entirely inundated in the rainy season, are so parched in the dry season, that several huntsmen, who had lost their way in the forests with which they are covered, had nearly died of thirst.

The celebrated traveller, Dampier, relates that, he many times escaped this fate by the assistance of a very extraordinary vegetable, which he observed upon a species of pine that is very common there: it resembles a bunch of leaves, placed upon one another in stages; and on account of its form, and of the tree upon which it grows, he calls it the *pine-apple*. This apple is full of wa-

ter, so that on piercing the base with a knife, there immediately issues a good pint of water, exceeding clear and wholesome.

Father *du Tertre* relates, that he frequently found similar refreshment in the cornet-shaped leaves of a species of a balizier, which grows upon the sandy plains of Guadaloupe. I have heard many hunters say that, nothing is more proper for gratifying thirst than the leaves of the misletoe, which grows upon our own trees.

XXIII.

There is not a single flower that is pleasing to the senses of man, but which grows at his foot, is within the reach of his hand, or is, at least, conspicuous to his eye. All odoriferous flowers are placed upon herbage, or upon shrubs, as the heliotrope, or sun-flower, the pink, the gilly-flower, the stock, the violet, the rose, and the lilach. Nothing resembling these grows upon the lofty trees of our forests. Some brilliant flowers grow upon large trees of foreign countries, as the tulipfera, and the great chesnut of India; but these, both by their size and color, are rendered perfectly visible to our eyes. Some trees of India are, indeed, highly perfumed; but this perfume is all over the tree, in the leaves, not in the blossoms, which are scarcely apparent, and have frequently, as in the cinnamon, in direct contrast

with the tree, the most disagreeable odour. The beautiful and fragrant flower of the magnolia grows upon the lower part of the tree. Besides, the laurel that bear it, is like the spice trees, a tree of moderate elevation.

There is no less adaptation in the forms and sizes of our fruits. There are many that seem shaped for the mouth of man, as cherries and plumbs; others for his hands, as apples and pears; others much larger, as melons, are divided on the rind, and appear to be intended for a family refreshment: there are some, even in India, as the jacq, and, with us, the pumpion, that may be divided among neighbors. Nature seems to have followed the same proportions in the various sizes of fruits destined for the nourishment of man, as in the magnitude of the leaves which are intended for shade in hot countries: for of these there are some large enough to shelter a single person; others, an whole family; others, all the inhabitants of an hamlet.

Nature has made parasols, in hot countries, for whole villages: for the fig tree, which in India is called, the fig tree of the banyans, grows even upon the burning sand of the sea shore, casting, from the extremity of its branches, a multitude of shoots, which, inclining toward the earth, take

root, and form, round the trunk, a quantity of arcades, covered with impenetrable shade.

The interesting and unfortunate *Robert Knox*, tells us, in his excellent account of the island of Ceylon, that one of the leaves of the talipot is large enough to cover fifteen or twenty persons. When it is dry, adds he, it is at once strong and pliant, so that it may be folded and unfolded at pleasure, being naturally plaited like a fan. In its folded state, it is not bigger than a man's arm, and extraordinarily light. The people cut it into triangular pieces, though it is naturally round, and each carries a piece over his head, holding in his hand before him the most pointed end, to open a path through the bushes. The soldiers make tents of these leaves. He regards this tree, with reason, as one of the greatest blessings of Providence, in a country that is alternately burnt by the sun, and inundated by the rains during six months together.

In our temperate climates we experience equal benevolence from the hand of Nature. It is in the hot and thirsty season that she bestows upon us an abundance of fruits full of refreshing juices, such as cherries, peaches, and melons; and, at the approach of winter, those that warm us by their oils, as the almonds and the walnut. Some naturalists have regarded the ligneous, or woody

shells of these fruits, as intended to preserve them from the cold of winter: but they are also for the purpose of floating, and travelling, in order that they may plant themselves upon banks never enriched with them before.

XXIV.

The *Author of Nature* has judged the harmony of sounds to be so necessary to man, that there is not a single spot upon the whole earth that has not its singing bird. The linnet of the Canaries commonly frequents, in those islands, the flinty gutters of the mountains. The goldfinch loves the sandy downs; the lark the fields; the nightingale deep thickets, by the side of brooks; the bullfinch with its sweet notes perches upon the white thorn; and the thrush loves the laurel; the yellow-hammer, the greenfinch, and all other singing birds, have their favorite stations.

It is very remarkable, that every where these little birds instinctively, as it were, approach the habitation of man. If there is one straw-roofed dwelling amid an extensive forest, to the neighborhood of that cabin all the singing birds confine themselves. They are never found in uninhabited districts. I have travelled more than six hundred leagues in the forests of Russia, and I have never seen little birds but in the environs of villages. In visiting the fortifications of Russian

Finland, with the general of the corps in which I served, we sometimes went twenty leagues in a day without seeing either a village or a bird. But when we saw sparrows flying among the trees, we imagined that we were near some inhabited place. This indication never deceived us. I mention this circumstance more particularly, because it will, possibly, be of use to persons who may lose their way in the woods.

Garcilaso de la Vega relates, that his father having been detached from Peru, with a company of Spaniards, to make discoveries on the other side of the Cordeliers, feared that he should have died with famine in the uninhabited vallies and marshes. He never could have got out had he not perceived in the air a flight of paroquets, which led him to suspect that there were dwellings somewhere in the neighborhood. He marched toward that point of the compass to which the paroquets had fled, and he arrived, after incredible fatigues, at a tribe of Indians who had fields of maize.

We may observe that Nature has not given an agreeable note to any sea or river bird, because it would be lost amid the noise of the water, and because the ear of man could not enjoy it at the distance of his abode upon land. If there are swans that sing, as is pretended, their song can

have few modulations, and it must resemble the cries of the duck, and of the goose. That of the wild swans who lately came to establish themselves at Chantilly, have only four or five notes. Aquatic birds have shrill and piercing cries, fit to be heard in the regions of winds and tempests, which they inhabit; and well adapted to their noisy abodes, and melancholy solitudes.

The melodies of song birds have similar adaptations to places which they occupy, and even at the distances which they live from our habitations. The lark, who makes its nest among our corn, and who loves to rise out of sight into the air, sings so loudly that it is heard long after it is lost to our eyes. The swallow, who flies grazing the walls of our houses, and who reposes upon our chimnies, has a little soft chirping voice, which does not stun the ear as it would if it were as loud as that of the songsters of the thickets.

The nightingale, for instance, is heard at the distance of half a league. This bird avoids the company of man; but he loves to place himself within sight of our habitations, and within reach of our ears. For this purpose he chooses the most inclosed places, that their echoes may increase the power of his voice. When he has settled himself in the orchestra, he sings an unknown drama, that has its exordium, its developements, and its reci-

tatives; mixed, sometimes with the blithest sounds of joy, sometimes with bitter and lamentable recollections that end in long-drawn sighs. His song is heard in the beginning of that season in which the charms of Nature are restored, and it seems to present man with a picture of the varied career that she has to run.

The seeming ruins of the earth, as the rocks that roughen its surface in so many places, have all their use. Rocks appear to us as ruins, only because they are not squared or polished like the marble of our monuments, but their projections and crevices are necessary for vegetables and animals, who there seek nourishment and shelter. It was for the benefit of her sensitive and vegetative creation that Nature made the fossile kingdom; and as soon as man has elevated masses of stone upon the surface of the earth, she hastens, with her chisel, to destroy its useless regularity, in order that it may contribute to the general harmony of the world.

If we enter into the vast consideration of the beginning and end of *her* work, those of the most celebrated people, and of the highest antiquity, become extremely frivolous in our eyes.

A little pebble upon the edge of our brooks, is more ancient than the pyramids of Egypt.

Many cities have been destroyed since that was created. If I wish to add some moral sentiment to the monuments of Nature, I may say, while looking on a rock: "Here, perhaps, sat the good Fenelon, meditating upon his divine Telemachus: hereon, haply, at some future day, it may be graven that he was the teacher from whom kings learned that glory consists in the happiness of mankind, and happiness in the advantages of agriculture; posteriry will stop to look on the same stone that I have contemplated." Thus it is, that I embrace the past and the future, at the sight of a mere insensate rock; and consecrating it by a simple inscription, render it more venerable than if I were to decorate it with the five orders of architecture.

STUDIES OF NATURE.

First Study.

IMMENSITY OF NATURE.

It is several years since I formed the design of writing a general history of Nature, in imitation of *Aristotle*, *Pliny*, Chancellor *Bacon*, and many illustrious modern authors. The field appeared to me so vast, that I could not believe it to have been entirely trodden over before me. Besides, Nature invites men of every age; and if she promises sublime discoveries to genius only, she reserves some little harvests at least, for the ignorant; and for such especially, as, like myself, stop at every step, delighted with the beauty of her divine productions.

I proposed to begin the composition of my work when *I had ceased from observing*, and when I had collected *all the materials necessary for the history of Nature*: but I discovered myself to be like the child who dug a hole in the sand with a shell, to hold the water of the ocean.

The extent of Nature is infinite, and I am a man, confined on every side. Not only the *general history of Creation*, but that of the *smallest plant*, is far above my capacity. I will relate the circumstance that convinced me of this.

The Strawberry.

One day, in summer, while I was busy in putting in order some observations which I had made upon the harmonies of this globe, I perceived upon a strawberry plant, which had been accidentally placed in my window, some small flies, which were so exceedingly beautiful, that I took a fancy to describe them. Next day I saw a different sort upon the plant, and these, likewise, I described. In the course of three weeks, proceeding in this manner, I wrote descriptions of *thirty-seven species of insects which resorted to my strawberry plant.* At length they came in such crowds, and presented such variety, that I was obliged to relinquish this study, though very amusing, because I had neither *leisure*, nor, to confess the truth, *expression.*

The insects which I observed were all distinguished from each other by their colors, their forms, and their motions. There were some that shone like gold, others were of the color of silver, and others of brass: some were spotted, some striped, blue, green, brown, chesnut co-

lored. The heads of some were rounded like a turban, those of others were drawn out in the figure of a cone: some were dark like a tuft of black velvet, others sparkled like a ruby. There was not less diversity in their wings. In some they were long and brilliant, like transparent plates of mother-of-pearl; in others short and broad, resembling the net-work of the finest gauze. Each had a particular manner of disposing and managing his wings. Some carried theirs perpendicularly, others horizontally; and they seemed to take pleasure in displaying them. Some flew spirally, like butterflies; others rose into the air by flying against the wind. This is like the mechanism of a paper kite, which rises while the wind is against it.

Some settled upon the plant merely to deposit their eggs; others, to shelter themselves from the sun. But the greater part came for reasons with which I am totally unacquainted; for some went and came in incessant motion; others remained a considerable time, removing only parts of their bodies. A great number were entirely motionless, and were occupied, perhaps, like myself, in making observations. I paid no attention to many tribes that were attracted by my strawberry, because they were sufficiently well known: such as the snail, which nestles under the leaves;

the butterfly, which hovers round; the beetle, which digs about the roots; the small worm, which finds the means of life in the *parenchyme*, that is, in the mere thickness of the leaf; the wasp, and the honey-bee, which hum around the blossoms; the gnat, which sucks the juice of the stem; the ant, which licks up the gnat; and, to omit the rest, the spider, who makes prey of most of these, and who, to catch them, spreads his net all over the neighborhood.

However minute these objects may be, they were surely worthy of my attention, since Nature bestowed upon them hers. *I could not refuse them a place in my general history*, while *Nature* gave them one in the *universe*. For a still stronger reason, had I written an history of my strawberry plant, I must have taken these into the account. Plants are the habitations of insects, and one cannot give the real history of a city without speaking of its inhabitants.

The immeasurable extent of my undertaking will be still more evident if we recollect that *my strawberry plant was not in its natural situation.* In the open country, or the border of a wood, or along the brink of a rivulet, it would have been resorted to by many other species of living creatures. It was in a pot of earth, amid the smoke

of Paris. I observed it only at vacant moments. I knew nothing of the insects who visited it during the *various hours of the day*; still less was I acquainted with those who came at *night*, attracted by its *odorous* emanations, or, perhaps, by a *phosphoric light*, which escapes our senses. I was ignorant of those who might frequent it at *different seasons of the year*, and the *rest of its connections* with the welfare of reptiles, amphibious animals, fishes, birds, quadrupeds, and, above all, with man, who calls every thing worthless which he cannot immediately use.

But all these observations, made from the height of my greatness, if I may use the expression, would, at last, be very far from sufficient; for, in this case, my knowledge would never be equal to that of one of the flies who make it their habitation. Not one of these, on examining it, with his little spherical eyes, but must distinguish an infinity of objects, which I could not perceive without a microscope, and after many laborious researches. Their eyes are even greatly superior to the microscope, which only shews us the objects that are in its focus, that is, at the distance of a few lines; whereas they perceive, by a mechanism of which we have no idea, every thing that is close, and that is far off. Their eyes are at once microscopes and telescopes. What is more,

by their circular disposition round the head, they have the advantage of viewing the whole circuit of the heavens at the same instant; while those of the astronomer can take in, at most, only the half. Thus my flies must see, at a single glance, in my strawberry plant, a distribution and combination of parts, which I could not discern with a microscope: for that instrument would shew only a single part at a time, separated from all the rest.

Upon examining the leaves of this plant with a lens*, which magnified only in a very trifling degree, I found them *divided into compartments, surrounded by bristles, separated by canals, and strewed with glands.* These compartments appeared to me to be like *large verdant enclosures*, their bristles like *vegetables* of a particular order, of which some were upright, some inclined, some forked, some hollowed into tubes, from the extremity of which a liquid distilled; and their canals, as well as their glands, seemed full of a brilliant fluid. In plants of a different species, these bristles, and these canals, exhibit forms, colors, and fluids, totally different. There are even glands which resemble basons, round, square, or radiated.

* Magnifying glass.

Now, Nature has made nothing in vain. Wherever she has prepared an habitation, she immediately peoples it. She is never straightened for want of room. She has placed animals with fins in a single drop of water, and in such multitudes, that *Leewenhoek*, the natural philosopher, counted thousands! Many others after him, and among the rest, *Robert Hook*, have seen, *in one drop of water*, as small as a grain of millet, some ten, others thirty, and some as far as forty-five thousand! Those who know not how far the patience and sagacity of an observer can go, might perhaps doubt the accuracy of these observations, if *Lyonnet*, who relates them in *Lesser's* Theology of Insects,* had not demonstrated the possibility of it, by a piece of mechanism, exceedingly simple. We are certain, at least, of the existence of those beings whose figures have actually been drawn. Others are found whose feet are armed with claws, on the body of the fly, and even on that of the flea!

It is credible then, from analogy, that there are animals feeding upon the leaves of plants, like the cattle on our meadows, which repose under the shade of those bristles or bushes, imperceptible

* Book II. Chap. iii. See the last Note.

to our eyes, and who drink from the glands, which are round and brilliant like suns, liquors of the colors of gold and silver. Every part of the flower must exhibit spectacles to them of which we can have no idea. The yellow antheræ of flowers, suspended by fillets of white, exhibit to their eyes double rafters of gold balanced upon pillars fairer than ivory ; the corolla must seem to them an arch of unbounded magnitude, decorated with the ruby and the topaz ; the nectarium, rivers of sugar ; the other parts of the floweret must shew cups, urns, pavillions, domes, which neither the architect nor the goldsmith have yet learned to imitate.

I do not say this from conjecture ; for having one day examined with a microscope the flowers of thyme, I distinguished, with the most extreme admiration, superb flagons with long necks, which were formed of a substance resembling the amethyst, from the gullets of which seemed to flow ingots of liquid gold. I have never examined the simple *corolla* of the smallest flower, without finding it composed of an admirable substance, half transparent, studded with brilliants, and tinted with the most lively colors. Beings who live under their rich reflexes*, must have ideas, very

* The only idea, and that extremely imperfect, which we

different from ours, of light, and of the other phenomena of Nature. A drop of dew, filtering in the capillary and transparent tubes of a plant, presents to their eyes a thousand cascades; the same drop, fixed as a wave, on the extremity of one of the bristles, must seem an ocean without a shore, evaporated into the air, a vast ærial sea. They must of course see fluids ascending, instead of descending; assuming a globular form, instead of sinking to a level; and rising into the air instead of falling!

In these *ephemerous** beings we must see the youth of a single morning, and the decripitude of one day!

Such, then, must have been my strawberry-plant, and its natural inhabitants, in the eyes of the winged insects which alighted upon it: for the reader will remember that I have been speaking only of those minute creatures which are imperceptible to the naked eye: but if I had been capable of acquiring as much knowledge respecting the plant, as is possessed by these itinerant

can form of these *rich reflexes*, must be derived from painted windows, through which the sun

"Pours the rich flood of mellowed day." *Trans.*

* Short-lived, fleeting. The expression is taken from the insect called *ephemera*. *Trans.*

insects, I should still have been far from acquiring the full history of it. To accomplish this I must study its relation to the other parts of Nature: to the sun which opens its blossoms; to the winds which sow its seeds; to the brooks, the banks of which it strengthens with its spreading roots, and embellishes with its foliage, its flowers, and its fruits. I should also know how it is preserved in winter, during a cold capable of cleaving stones asunder; and how it re-appears in verdure, in the spring, without any assistance to preserve it from the frost; how, feeble and crawling upon the ground, it exalts itself from the depths of humble vallies even to the summit of the Alps, and traverses the globe from north to south, from mountain to mountain, forming in its way a thousand charming pieces of chequer-work, with its white flowers, and rose-colored fruit, mingling with the plants of every climate; how it has been able to scatter itself from the mountains of Cachemire to Archangel, and from the *Felices* in Norway to Kamschatka; how, in a word, we find it in the two Americas, though an infinite number of animals are every where making war upon it, and though no gardener is at the trouble of sowing it again!

What a task, then, would it be to write an history like this of all the species of vegetables scattered over the face of the whole earth! If, from

the vegetable, we make a transition to the animal kingdom, a field of incomparably greater extent presents itself. An intelligent naturalist, at Paris, some years ago, announced that he was in possession of more than thirty thousand distinct species of animals. I know not whether the king's magnificent cabinet may not contain more; but I know well that his herbals contain only eighteen thousand plants, and that about six thousand are in a state of cultivation in the royal botanic garden. This number of animals, however, though so superior to that of vegetables, is a mere nothing in comparison with the number of distinct species that exist upon the globe.

What an undertaking, then, would it be to describe each of these beings with the skill of a *Reaumur!* The life of one man of genius would be scarcely sufficient to compose the history of a few insects. However curious may be the memoirs transmitted to us, after the most careful research, respecting the manners and conformation of the animals best known to us, in vain do we still flatter ourselves with our having acquired a complete acquaintance. The principal requisite, in my opinion, is still wanting; I mean the origin of their friendships and their feuds. In this consists, if I am not mistaken, the essence of their history. To this must be referred their instincts,

their loves, their wars; the attire, the arms, and the very form which Nature gives them. A moral sentiment seems to have determined their physical organization. I know not of any naturalist who has engaged in a research of this sort.—Philosophers of name, unfaithful to the testimony of their reason and conscience, have dared to represent them as mere machines. They ascribe to them blind instincts which regulate all their actions, without passion, without will, without choice, and even without any degree of sensibility.

To contradict these opinions I shall have recourse not to those animals whose industry excite our admiration, such as the beaver, the bee, the ant, &c. I shall produce only one example, taken from the class of those which are most indocile, such as fishes, and shall select it from among a species governed by an instinct the most impetuous and the most stupid, which is gluttony.

The Shark

is a fish so voracious that he will not only devour his own species, when pressed by hunger, but he swallows, without distinction, every thing that falls from a ship into the sea, cordage, pitch, wood, iron, nay, even knives. Nevertheless, I have been a frequent witness of his abstinence, in two remarkable cases; the one is, he never eats, how-

ever urged by famine, a small kind of fish, speckled with yellow and black, called the pilot-fish, which swims just before his snout to guide him to his prey, which he cannot see till he is close to it: for Nature, as a counterbalance to the ferocity of this fish, has made him almost blind. The other case is this: when you throw a dead fowl into the sea, the noise brings him to the spot, but on discovering it to be a fowl, he immediately retires without devouring it. This has furnished the sailors with a proverb: *the shark flees from the feather.* It is impossible, in the first case, not to ascribe to him some portion of understanding, which represses his voracity in favor of his guides, and not to attribute, in the second, his aversion to feathered flesh, to that Universal Reason, which, destining him to live along the shallows, where cadaverous substances, of creatures perishing in the sea, fall, and are deposited, that he may not destroy the sea fowls which resort thither in great numbers, employed, like himself, in looking out for a livelihood, and in cleansing the shores from impurities.

Other philosophers, on the contrary, have ascribed the manners of animals, as those of men, to education; and their natural affections, as well as their animosities, to resemblance or dissimili-

tude of form. But if friendship is founded on similitude of form, how comes it that

The Hen,

who walks in security, at the head of her brood, among the oxen and horses of a farm yard, though part of her family is sometimes accidentally crushed by the feet of those animals, collects her young with anxious inquietude at the sight of the hawk, a feathered animal, like herself, who appears in the air but as a black point, and whom, perhaps she hardly, if ever, saw before? Why does

The Dog

in the yard fall a barking, in the night time, at the mere smell of the fox, an animal which has a strong resemblance to himself? If habits of long standing could influence animals as they do men, how has it been possible to render

The Ostrich

of the desert familiar to such a degree, that he has been made to carry children; whereas no skill has hitherto been able to tame

The Swallow,

a bird which has, from time immemorial, built his nest in our houses.

These, however, are not the only instances in which false science misleads us. What a spectacle do our

Cabinets of Preserved Animals

present?—To no purpose has the art of *Daubenton* endeavored to keep up the appearance of life. Let industry do its utmost to preserve the form, their stiff and motionless attitude, their fixed and staring eyes, their bristly hair, all declare that death has stricken them. In these cabinets even beauty itself inspires horror, whereas the most homely objects are agreeable, when placed in the situation which Nature has assigned them. I have been often highly diverted in the West Indies, at the sight of a crab on the sand, straining, with his claws, to break into a large cocoa-nut; or of a shaggy ape balancing himself on the summit of a tree, at the extremity of a *lianne*, that was loaded with pods and scarlet flowers.

In order to form a right judgment of the magnificent spectacle of

Nature,

we must suffer every thing to remain in its place, and remain ourselves in that which Nature has assigned to us. It is for the sake of our happiness that she has concealed from us the laws of her omnipotence. How can a being so feeble as man, embrace infinite space! But she has brought within his reach what is at once useful and delightful

to know; namely, the emanations of her beneficence. In the view of uniting mankind by a reciprocal communication of knowledge, she has given to each of us in particular, ignorance; treasuring up science in common to render us necessary and interesting to each other.

The earth is covered over with vegetables and animals, the simple vocabulary of which no scholar, no academy, no one nation, will ever be able perfectly to acquire; but it is to be presumed that the *human* race is acquainted with all their properties. In vain do enlightened nations boast that they have gathered within themselves all the arts and all the sciences. It is to

Savages,

to men utterly unknown, that we are indebted for the first observations, which are the sources of all science. It is neither to the polished Greeks nor Romans, but to nations which *we* denominate barbarous, that we owe the use of simples, of bread, of wine, of domestic animals, of cloths, of dyes for cloths, of metals, and for every thing most useful and most agreeable for human life. Modern Europe glories in her discoveries; but

Printing,

Which ought, it is said, to immortalise the inventor, is to be ascribed to a person so obscure, that

several cities of *Holland*, of *Germany*, nay, even of *China*, have claimed the discovery as their own.

Galileo

would never have calculated the gravity of air, but for the observation of a fountain-player, who remarked that water could rise only to thirty-two feet in a forcing engine.

Newton

had never read the heavens, if some children, playing in Zealand with the glasses of a spectacle-maker, had not suggested the first idea of the telescopic cylinder. Our artillery would never have subjugated

America,

the New World, if a lazy monk had not happened to discover gun-powder; and whatever glory Spain may take to herself on account of the discovery of that vast portion of the globe, the savages of Asia had planted empires there long before the arrival of *Christopher Columbus*. What, indeed, had become of that great man himself, if the good and simple inhabitants whom he found there had not supplied him with provisions? Let then, academies accumulate machines, systems, books, eulogiums; the chief praise of all is due to the ignorant, who furnished the first materials.

Advancing no higher claim, I presume to contribute my humble offering. It is the fruit of

many years of application, which amid long and bitter storms, have, occupied in these sweet researches, glided away as a single day. I earnestly wished, if I could not reach a boundary at which I might stop, at least to give to others the pleasures which I enjoyed along my way.

I shall, as I have already said, examine each object, not as separated from every thing else, but as connected with the other parts of the creation. Nature herself indicates this order. She has adapted to plants the smell, the mouths, the lips, the tongues, the jaws, the teeth, the beaks, the stomach, the chylification, the secretions which ensue, in a word, the appetite and the instinct of animals. It cannot, indeed, be affirmed, with truth, that every species of animal lives on one single species of plant; but any person may convince himself, by experiment, that each of them prefers some one to every other, when permitted to chuse. This preference is particularly remarkable, at the season when the production of their young engages attention: then they are determined in favor of that which provides them, at once, with nutriment, litter, and shelter, in the most perfect suitableness to their situation. Thus the

Goldfinch

affects the thistle, whence he takes his name*, because he finds a rampart in its prickly leaves, food in its seeds, and materials for his nest in its down.

The Bird-Fly

of Florida prefers, for the same reasons, the *bignonia:* This is a climbing plant, which finds its way to the top of the highest trees, and which often entirely covers their trunks. He builds his nests in one of its leaves, which he rolls into the form of a cornet; he finds his food in its red flowers, resembling those of the fox-glove, the nectareous glands of which he licks; he plunges his little body into them, which appears in the heart of the flower like an emerald set in coral; and he gets in sometimes so far, that he suffers himself to be surprised there and caught.

These relations of the animal to the vegetable parts of creation are so striking in

Insects

that, naturalists themselves, notwithstanding their prodigious number of isolated and indeterminable

* The goldfinch takes his name from the thistle, in the *French language*. In the English tongue he is only distinguished from the other *finches* by the epithet *gold*, or *golden*, in allusion to the yellow feathers upon his wing. In *French*, the thistle is *chardon*, and the goldfinch, *chardonneret*.

classes, have characterised some of them by the name of the plant on which they live: such are the *catepillar* of the *tithymale*, and the *silk-worm* of the *mulberry*. But I do not believe that there is a single animal which deviates from this plan, not even the carnivorous. Though the life of these last appears to be, in some measure, grafted upon that of living creatures, there is not one of them but what makes use of some species of vegetable. We may observe this, not only in dogs, who feed upon the grass which bears their name, and in wolves, foxes, birds of prey, which eat the plants that bear their names; but even in the

Fishes

of the sea, which are entire strangers, it would seem, to the earth. These are attracted, at first, to the banks, by insects, whose spoils they collect, which establishes between them and vegetables intermediate relations; afterward by the plants themselves, for most of them come to spawn upon our coasts only when certain plants are in flower or in fruit. If these happen to be destroyed, the fishes visit us no longer.

Dennis, governor of Canada, relates in his History of North America, that the

Cod

which used to frequent the coasts of the Island of

Miscou, disappeared in 1669, because, in the preceding year the forests had been devoured by a conflagration. He remarks that the same cause had produced the same effect in different places.

We shall likewise speak of the smell and taste of

Plants.

It was from these man first acquired knowledge of their poisonous, medicinal, or nutritive qualities. Nay, the very

Sounds of Plants

are not to be overlooked; for, when agitated by the winds, most of them emit sounds peculiar to themselves, and which produce harmonies or contrasts; the most agreeable, with situations of the places where they usually grow. In India, the hollow canes of bamboo, which shade the banks of the rivers, imitate, as they rustle against each other, the gushing noise excited by the motion of a ship through the water; and the pods of the cinnamon, agitated by the winds upon the mountain's top, the tic-tac of a mill. The trembling leaves of the poplar convey to our ears, in the wood, the bubbling of a brook. The green meadows and calm forests, fanned by zephyrs, represent, in the hollow vallies and on declivities of rocks, the undulations and murmurs of waves breaking upon the sea-shore. The early inhabi-

tants of the globe, struck with these mysterious sounds, imagined that they heard oracles pronounced from the trunk of the oak, and that Nymphs and Dryads inhabited, under their rugged barks, the mountains of Dodona.

The Correspondences

and mutual adaptation of each part of the plant to the other is so perceptible, that if you were to shew to a naturalist of ability any representation of a plant or animal which he had never seen, he could tell, from the harmony of its parts, whether it were a creature of the imagination or a copy after Nature. One day, the students in botany, wishing to put to trial the knowledge of the celebrated *Bernard de Jussieu*, presented to him a plant which was not in the collection of the Royal Garden, requesting him to indicate its *genus* and *species*. As soon as he cast his eyes upon it, he said, "This plant is artificially composed: you have taken the leaves of one, the stalk of another, and the flower of a third." This was the fact. They had, nevertheless, selected, with the greatest judgment, the parts of such as had the most apparent resemblance.

We can form no judgment of the works of Nature, but in the place, and at the time she is pleased to display them. All that we imagine beyond this, presents only contradiction, doubt,

error, or absurdity. Let others extend the boundaries of our science, I shall consider myself to have rendered a more useful service to my fellow creatures, if I am enabled to fix the terminations of our ignorance. Our illumination, like our virtue, consists in descending, and our force in becoming sensible of our weakness. If I do not pursue the road which Nature has reserved for herself, I shall at least walk in that which man ought to take. It is the only one which presents him easy observations, useful discoveries, enjoyments of every description, without instruments, without a cabinet, without metaphysics, and without a system.

In order to convince ourselves of the beauty which results from a combination of objects, each in its proper place, let us form, according to the plan we have proposed,

A little Groupe

of the most common sites, vegetables, and animals, of our climates. Let us suppose a soil the most obdurate, a craggy protuberance on the coast, where a river disgorges itself into the ocean, presenting a steep toward the sea, and a gentle declivity toward the land: that, on the side turned toward the sea, the billows cover with foam rocks clothed with sea-weed, fucuses, alga-marinas, o

all colors and of all forms, green, brown, purple, in tufts and garlands, as I have seen them on the coast of Normandy, affixed to rocks of white marl, which the sea detaches from the main shore. Let us farther suppose that, on the side of the river, we see on the yellow sand a scanty verdure, mixed with a little trefoil here and there, and here and there a sprig of marine wormwood. Let us introduce some willows, not like those which grow in our meadows, but the native crop of the soil, and similar to those which are to be seen on the banks of the Spree, in the vicinity of Berlin, with broad bushy tops, and rising to the height of more than fifty feet. Let us not forget, in this arrangement, that agreeable harmony which arises from the mixture of different ages, which is so desirable in every species of aggregation, but especially in that of vegetables. Let us observe of these willows, so smooth and full of moisture, some pushing their young branches into the air, and others of an aged form, with pendant top and hollow trunk.

Let us add to these the attendant plants, such as the green mosses, and gilded *lichens*, which marble their grey bark, and some of their convolvoluses, which love to climb up their trunks, and to embellish the branches, which display no flowers of their own, with their heart shaped

leaves, and bell-flowers as white as snow. Let us now put the natural inhabitants of the willow and its plants: their butterflies, their flies, their beetles, and other insects, together with the feathered animals which make war on them, such as the water-hen, polished like burnished steel, which catches them in the air; the wag-tail which pursues them on the land, making the movement whence he derives his name, and the king's-fisher, who hunts for them along the surface of the water—add these, and you will see a multitude of agreeable harmonies arising out of a single species of tree."

The picture, however, is still incomplete. To the willow let us oppose the alder, which likewise affects the banks of the river; and which, by its form, resembling that of a long tower; its broad foliage, its dusky verdure, its fleshy roots, formed like cords running along the banks, and binding together the soil, forms a complete contrast with the extended mass, the light foliage, the silver verdure, and the trundling roots of the willow. Add to this, the individuals of the alder, of different ages, rising like so many verdant obelisks, with their parasite, or humble dependant plants—such as the maiden-hair, spreading into stars of verdure over the humid trunk, the long harts-tongue, hanging from the boughs down to the

ground, and the other accessaries of insects, fowls and even quadrupeds, which, themselves form contrasts—as to form, color, gait and instinct, with those of the willow, and we shall have a delightful assemblage of vegetables and animals, composed of two trees only, together with their accompaniments. If we

Illumine our little Plantation

with the first rays of morning, we shall behold at once, shades deep, and shades transparent, diffused over the verdure; a dark and a silvered verdure intersect each other, on the azure of the heavens, and their soft reflexes blended together, moving on the bosom of the waters. Let us farther imagine, what neither poetry nor painting can give; the odour of the plants, and even the smell of the sea; the rustling of leaves, the humming of insects, the matin song of the birds, the hollow murmuring noise, intermixed with silence, of billows breaking upon the shore; and the repetition of all these sounds, repercussed by the distant echos, which losing themselves in the sea resemble the voices of the Nereids: Ah! if ever love, or philosophy, should lead you such a solitude, you will find it a sweeter asylum than the palaces of kings possess.

Would you excite other sensations? Would

you hear passions and sentiments breathed from the bosom of the rocks? Amid the groupe, let the tomb of a virtuous and unfortunate man arise, whereon these words may be read:

Here rests J. J. ROUSSEAU.

Will you increase the effect, the pathos of this picture, without doing violence, however, to Nature, by the impropriety of the addition? Place at a distance the time, the scene, the monument. Let the island be the island *Lemnos*; the trees of our thicket, laurels and wild olives, and this tomb the tomb of

Philoctetes.

Look at the grotto in which this great man lived, abandoned by the Greeks whom he had served. His wooden pot; the tattered garments with which he was clothed; the bow and the arrows of Hercules, which, in his hands, had subdued so many monsters, and with which he at last wounded himself: look at these, and you will be impressed with two powerful sensations at once: the one, physical, which increases as you approach the works of Nature; because their beauty discloses itself only to the eye which examines it: the other moral, which grows upon you as you withdraw from the monuments of virtue: because to do good to men, and to be beyond their reach, has a resemblance to the *Deity*.

What would it be then, if we were to cast only a glance over the general harmonies of this globe! To speak merely of those which are best known to us; behold how the

Sun

constantly surrounds *one* half of the earth with his rays, while night covers the earth with her shade. How many contrasts, and concords result from the ever changing opposition of these! There is not a single point in the two hemispheres where there does not alternately appear a dawn, a twilight, a morning, a noon; a fiery western sky; a night, sometimes studded with stars, sometimes obscured by clouds. Before the sun, the seasons walk hand in hand, like the hours of day! Spring, crowned with flowers precedes his car; Summer surrounds it with her harvests; and Autumn follows it with her horn filled with fruits. Winter and night retiring to the poles, to the boundaries of the world; vainly endeavor, even there, to limit his magnificent course! Vainly do they raise out of the bosoms of the south and northern poles; continents of ice, with their vallies, their mountains, and their *aurora borealis*. The father of day overturns with his shafts of fire, these fantastic fabrications; and, without descending from his throne, takes again the empire of the universe. Nothing escapes his fruitful heat. From the bosom of the ocean

he raises into the air the rivers that afterwards flow through the two worlds.* He gives commandments to the

Winds,

to distribute them over islands and continents.—These invisible children of the air carry them from place to place in a thousand capricious forms. Sometimes they are spread in the heavens like veils of gold, and streamers of silk; sometimes they are rolled up in the form of frightful dragons, and roaring lions, that cast forth lightnings and thunders. Again the winds pour them out on the mountains in as many different forms; in dews, in rain, in hail, in snow, in impetuous torrents. However irregular the mode of performing their services may appear, every part of the earth receives from them neither more nor less than its accustomed portion of water. Every river fills his urn, and every naiad her shell. In the progress of the winds they impress on the liquid plains of the sea, the variety of their cha-

* The heat of the sun causes water to rise into the air, where it forms clouds. Nothing can be more easily understood than this part of the economy of Nature, since it is exactly similar to steam, or vapor, rising from warm water. The winds disperse these clouds over islands and continents, where, descending in rains, they supply 'the rivers that flow through the two worlds.' Geographers call the *two Americas*, the *New World*, and Europe, Asia and Africa, the *Old World*.

racters. Some scarcely ruffle the surface of the waves; others swell them into billows of azure; others drive them from the bottom with roaring noises, and cover high promontories with their foam. Every place possesses

Harmonies,

that are peculiarly its own, and every place presents them in rotation. Run over any meridian, or parallel that you please; you will find in it mountains of ice, and mountains of fire; plains of every kind of level, and hills of every curve: islands of all forms, and rivers of all currents; some spouting up, as if they issued from the centre of the earth; others precipitating themselves, as if they fell from the clouds. All this while, our globe, agitated with such a variety of convulsive movements, and loaded with burdens, apparently, so irregular, advances in a steady and unalterable course through the immensity of the heavens.

Beauties of another order decorate its architecture, and render it habitable to sensible beings. A girdle of

Palm Trees,

on which grow the date and the cocoa, surrounds it between the burning tropics; and forests of mossy firs begird it under the polar circles. Other vegetables extend, like rays, from south to north,

and having reached a certain latitude expire. The

Banana

advances from the line to the southern shores of the Mediterranean. The

Orange

crosses that sea, and embellishes with its golden fruit, the southern extremities of Europe. The most necessary plants, such as

Corn,

penetrate the farthest, and, strong from their weakness, extend, in the shelter of the vallies, from the banks of the Ganges to the shores of the Frozen Ocean. Others more hardy, take their departure from the rude climates of the north, advance over the heights of Taurus, and make their way, under favor of the snows, even to the bosom of the torrid zone.

The Fir and the Cedar

rise upon the mountains of Arabia, and of the kingdom of Cachemir, and view at their feet the scorched plains of Aden and Lahor, where the date and the sugar cane are gathered. Other trees, equally averse to heat and to cold, have their centre in the temperate zones. The

Vine

languishes in Germany and Senegal. The apple,

the tree of (France) my own country, never saw the sun perpendicularly over its head, nor describing round it the complete circle of the heavens, to ripen its beautiful fruits.* But every soil has its own flowers and its own fruits. The rocks, the morasses, the mire, the sand, have each vegetables peculiar to itself. The very shallows of the sea are fertile. The cocoa thrives only on the shore and suspends its milky fruit over the billows of the briny deep. Other plants are adapted to the winds, to the seasons, to the hours of the day, with such exact precision, that *Linnæus* formed of them almanacks and time pieces. Who can describe the infinite variety of their figure? What cradles, arches, avenues, pyramids of verdure, loaded with fruits, present the most enchanting habitations! What happy nations live under their peaceful coverts! What delicious banquets are there prepared! Nothing of them is lost. The quadrupeds eat the tender leaves, the birds the seeds, other animals the roots and the rinds. The insects feed upon the offal: their infinite legions are armed with all sorts of instruments for collecting it. The

Bees

have hair, for picking up the fine powder of their flowers: the

* For this reason apples are red only on one side.

Fly

is provided with a pump (a trunk or proboscis, somewhat like that of the elephant) for sucking out the sap: the

Worm

has an auger, a wimble, a file, to separate the solid parts; and the

Ant

has pincers for carrying off the crumbs.

There are other tribes of creatures who pay no such attention to vegetables, and are adapted to the elements, to day, to night, to tempests, and to different parts of the globe. The

Eagle

trusts her nest to the rock which loses itself in the clouds; the

Ostrich

to the parched sands of the desert; the rose-colored

Flamingo

to the marshes of the southern ocean. The white bird of the tropic, and the black frigat, take pleasure in traversing together the vast expanse of the ocean, to see from the heights of the air the fleets of India under their wings, and to circumscribe the globe from east to west, disputing rapidity even with the course of the sun. In the same latitudes

The Turtle Dove and the Perroquet,

less daring, travel only from isle to isle, leading their young ones in their train, and picking up in the forests the grains of the spiceries which they brush off as they pass from branch to branch.—While fowls of this description preserve an equal temperature under the same parallels, others find it in the track of the same meridian. Long triangles of wild-geese, and of

Swans,

go and come every year from south to north, stop only at the hoary limits of winter, pass without admiration over the populous cities of Europe, disdaining their fruitful fields, presenting stripes of green corn in the midst of the snows; so far preferable to abundance does liberty appear, even to animals.

While these pursue winter, legions of heavy

Quails

cross the sea, and go to the south, in quest of summer's heat. Toward the end of September, they avail themselves of a northerly wind, to take their leave of Europe, and flapping one wing, and presenting the other to the gale, half sail, half oar, they graze the billows of the Mediterranean with their fattened rump, and descend on the sands of Africa, to serve for nourishment to the famished

inhabitants of Zara. There are animals which travel only by night. Millions of

Crabs,

in the Antilles, descend from the mountains by the light of the moon, clattering their claws, and present to the Caraibs, on the sterile shores of their island innumerable shells, filled with exquisite marrow. At other seasons, on the contrary, the

Tortoise

quits the sea and lands upon the same shores, to deposit her eggs in their barren sands.

The very Ices of the Poles are inhabited.

We find in their seas, and under their floating promontories of ice, the black

Whale,

loaded with more oil than a whole plantation of olives could produce. Foxes, clothed in precious furs, find the means of living on shores abandoned by the sun; herds of rein-deer there scratch up the snow in search of moss, and advance, braying, into those desolate regions of night, by the faint and unsteady light of the *Aurora Borealis*. By an admirable Providence, the most barren places present to mankind, in the greatest abundance, provisions, clothing, lamps and fuel, ready made to his hands. What a sweet sight it would be to behold

The Human Race

collecting all these various blessings, and communicating them to each other, in peace, from one climate to another! Every winter we wait, with anxiety, for the swallow and the nightingale to announce to us the return of fine days. It would be much more touching to see distant people arrive with the spring upon our shores—not with the noise of artillery, like modern Europeans; but with the sound of flutes and hautboys, like the ancient navigators in the first ages of the world! We should see the black Indians of southern Asia coming up, as heretofore, their vast rivers, in leathern canoes, to penetrate, by the waters of Petzora, to extremities of the north, and displaying, upon the shores of the frozen sea, the riches of Ganges. We should see the copper-colored Indians of America, in their hollowed trunks of trees, traversing the long chain of the Antilles, and from island to island, from shore to shore, carrying, perhaps even to our own continent, their gold and their emeralds. Long caravans of Arabs, mounted on camels and oxen, following the course of the sun, would travel from pasture to pasture, recalling the innocent and happy life of the ancient patriarchs.

Winter

itself would be no interruption to the intercourse

of nations. The Laplander, covered with warm fur, would arrive, under favor of the snow, in his sledge, drawn by rein-deer, and expose for sale in our markets the sable skins of Siberia. If men lived peaceably, every sea would be navigated, every land would be cultivated, all their productions would be gathered together. How interesting would it be to hear the adventures of these foreign travellers, attracted to us by the amiableness of our manners! They would not be slow in returning our hospitality, by communicating to us the secret virtues of their plants, of their industry, and of their traditions, which they for ever conceal from our ambitious commerce.

It is among the members of the vast family of mankind that the fragments of its history are scattered. How interesting would it be to learn the story of our ancient separation, the motives which induced each tribe to seek a separate habitation, on an unknown globe, and to traverse, as chance directed, mountains which presented no path, and rivers which had not yet received a name!

What pictures would be presented to us in the descriptions of those countries, decorated with magnificent pomp, as they proceeded from the hands of Nature; but wild, and unadapted to the necessities of man, destitute of experience!

They would tell us how astonished their forefathers were, at the sight of the new plants which every new climate exhibited to their view, and the trials which they made of them as means of subsistence; how they were aided, no doubt, in their necessitous circumstances, and in their industry, by some celestial intelligence, who commiserated their distress; how they gradually formed an establishment; what was the origin of their laws, of their customs, and of their religions.

What acts of virtue, and what generous loves, have ennobled the

Deserts,

and are unknown to our conceitedness! we flatter ourselves, because a few anecdotes have been picked up at random by travellers, that we have got full evidence of the history of foreign nations; but this is much the same as if we were to compose our own history from the tales of our mariners, or the artificial representations of a courtier, amid the jealousies of war, or the corruptions of commerce. The knowledge and the sentiments of a nation are not deposited in books. They repose in the heads and hearts of its individuals, if, indeed, there be such a thing on earth as a secure asylum for truth. We have already employed ourselves sufficiently in passing

judgment upon them; it would be more useful to us if we were to submit to be judged by them in our turn, and to profit by their expressions of astonishment at sight of our customs, of our sciences, and of our arts!

People are apt to imagine that every one is miserable, and out of the world, who do not live as they do: but it is those who live far from *Nature* that live out of the world. They would find thee,

Nature,

O eternal beauty! thee, always ancient and always new! O life, pure and happy, of all those who truly live, if they sought thee, Nature, only within themselves! Wert thou, indeed, a steril mass of gold, or a victorious prince, who may not be alive to-morrow, the world would then perceive thee, and believe thee capable of bestowing some pleasure upon them! The vanity of thy substance would then employ their vanity. Thou wouldst be an object proportioned to their timid and grovelling thoughts. But, because thou art too much within themselves, where they never enter, and too magnificent in thy appearance, diffusing thyself through infinite space, thou remainest to them an unknown GOD! In losing themselves they have lost thee! The order, and even the beauty, with which thou hast invested all thy creatures, to

serve as so many steps by which man may raise himself to thee, are transformed into a veil which disfigures thee to their sickly eyes. Men have sight but for shadows. The light dazzles them. That which is nothing is to them every thing, and that which is every thing, is with them for nothing. Nevertheless, he who never saw thee, has never seen any thing; he who has no relish for thee is an utter stranger to true pleasure; he is as if he were not, and his whole life is only an unhappy dream.

I myself, O my God, misled by the prejudices of a faulty education, pursued a vain felicity in systems of science, in arms, in the favour of the great, sometimes in frivolous and dangerous pleasures. In all these agitations I was running after misfortune, while happiness was within my reach. When I was at a distance from my native land, I sighed for joys which it contained not for me; and, nevertheless, thou wert bestowing on me blessings innumerable, which thou hast spread over the whole earth, which is the country of mankind. I disquieted myself with the thought that I had no powerful protector, that I belonged to no domineering party; and by thee I have been protected amid a thousand dangers, in which they have afforded me no assistance. It grieved me to think of living solitary, unnoticed, unregarded; and thou hast vouchsafed to teach me

that solitude is far preferable to an abode in palaces, and liberty to grandeur!

I never ceased to be happy, but when I ceased to trust in thee. O, my God, give to these labors of a man, I do not say the duration or the spirit of life, but the freshness of the least of thy works! Let their divine graces pass in my writings, and may they bring back a corrupted age unto thee, as I myself have been brought back! Opposed to thee, all power is weakness: supported by thee, weakness becomes powerful. When the rude northern blasts have ravaged the earth, thou callest the feeblest of winds; at the sound of thy voice zephyr breathes, the verdure revives, the gentle primrose, and the humble violet, cover the bosom of the dreary rocks with gold and purple.

END OF THE FIRST STUDY.

Second Study.

BENEFICENCE OF NATURE.

THE greater part of the inhabitants of polished nations, look on Nature with indifference. They are surrounded by her works, and they admire only human grandeur. But what is there in the history of man, that renders it half so interesting as that of Nature? The history of man has to boast only of vain objects of glory, of uncertain opinions, of bloody victories, or at most, of useless labors. If ever Nature is mentioned, we are called upon to hear of the ravages she has committed, and to place those misfortunes to her account which are almost always the results of our own imprudence. What care, on the contrary, does not this our common mother take of our happiness! She has spread her blessings from one pole to another, in order to encourage the union of mankind by the reciprocal communication of her productions; she is perpetually calling us back to the universal laws of justice and humanity, notwithstanding the prejudices that separate mankind, by causing our evils to come from the hands of our conquerors, whom we so

highly extol, and our pleasures from the labors of the wretched and oppressed, to whom we scarcely vouchsafe our pity.

When the princes of Europe issued forth to desolate Asia, they brought back to us the pestilence, the leprosy, and the small pox; but Nature shewed to a Dervise

The Coffee Plant

in the mountains of Yemen, and produced at the same time, our plagues from the croisades, and our delights of the cup from a Mahometan monk. The successors of these princes* subjugated America; and having bestowed on us, by that atchievement, an inexhaustible succession of wars and of diseases. While these were murdering the inhabitants with their cannon, a Caraib invited the sailors, in token of peace, to smoke in his *calumet*; the perfume of tobacco dissipated their cares, and they spread the use of it over all the earth: thus while the miseries of the two worlds came from artillery, which kings call their *last argument*, the consolation of civilized people came from the pipe of a savage!

To whom do we owe the use of

Sugar, *Chocolate*,

and so many salutary medicines? To naked Indians, to poor peasants, to miserable negroes!

* Alluding particularly to the Spaniards, and their crimes in South America.

The spade of slaves has done more good than the sword of conquerors has done mischief! Nevertheless, in which of our public squares are the statues of our obscure benefactors? Our historians do not condescend to preserve even their names. We need not, however, go so far in quest of proofs of our obligations to Nature, is it not to the study of her laws that London and Paris owe their multiplied illumination, collected from every quarter of the globe?

Where is the time when our

Forefathers

leaped for joy at finding a wild plumb-tree, on the banks of the Loire, or at catching some roe in the chace, on the vast plains of Normandy! Our fields, now clothed with harvests, our orchards and flocks, did not then furnish them with subsistence. Our ancestors wandered up and down, living on the precarious supplies of hunting, and not daring to trust to Nature. Her simplest phenomena filled them with terror. They trembled at the sight of an eclipse, of an *ignis fatuus** at a branch of misletoe of the oak.

I will suppose that a

Philosopher,

such as *Newton*, had then exhibited to them the spectacle of some of our natural sciences, and had

* A luminous vapour, sometimes seen in marshy places, vulgarly called *will of the wisp*.

shewn them with the microscope, forests in moss, mountains in grains of sand, thousands of animals in drops of water, and all the wonders of Nature; who, in *descending toward minuteness*, multiplies the contrivances of her wisdom, while the human eye becomes incapable of perceiving the boundary: let me go on to suppose that afterward discovering to them in

The Heavens

an *ascent of vastness* equally infinite, he had shewn them among the planets, scarcely perceptible to the naked eye, worlds much larger than ours: *Saturn*, three hundred millions of leagues distant; among the stars, still further off, had shewn them suns, which probably illuminate other worlds: in the whiteness of the *milky way*, stars, that are suns, innumerable, scattered about in the heavens as grains of dust on the earth, while man is ignorant whether all this may not be the mere skirts or threshold of God's creation! let me suppose that he had shown them these things, and consider with what transport they would have viewed a sight which we at this day see with indifference!

But I would rather suppose that, without the magic of our sciences, a man like

Fenelon,

had presented himself, arrayed in his virtue, and

thus addressed the *Druids**: "You frighten "yourselves with the terrors which you instil into "the people. God is righteous; he conveys to "the wicked terrible opinions, which recoil upon "those who spread them abroad: but he speaks "to all men in the blessings which he gives:— "Your religion would govern men by fear; mine "leads them with love, and imitates his sun in the "heavens, which he causes to shine upon the "good and upon the evil."

I will finally suppose, that after this, he had distributed among them the simple presents of Nature, till then unknown to them; sheaves of corn, slips of the vine, sheep covered with fleeces; oh! what would have been the gratitude of our forefathers! they would have fled with terror, perhaps, from the inventor of the telescope, mistaking him for a spirit: but, certainly they would have worshipped the author of Telemachus.

These nevertheless, are a very small part of the numerous blessings for which their rich descendants stand indebted to Nature. In truth, the whole world is employed to procure them pleasures. England, Spain, Italy, the Archipelago, Hungary, all southern Europe, is adding every year wools to their wools, wines to their wines, silks to their silks. Asia gives them diamonds, spices, muslins, chintzes, and porcelaine; Ame-

* The priests of ancient Gaul, or France.

rica, the gold and silver of her mountains, the emeralds of her rivers, the dyes of her forests, the cochineal, the sugar-cane, and the cocoa of her burning plains, for which their hands did not labor; Africa sends her ivory, her gold, her very children, which serve them as beasts of burden, all over the earth.

There is not a spot of the earth but what furnishes them some article of enjoyment. The gulfs of the ocean provides them pearls; its shallows, ambergris; its icy promontories, furs. At home they have reduced the rivers and mountains to vassalage, in order to reserve to themselves peculiar rights, in fisheries and chases. But there was no occasion to put themselves to so much expence. The sands of Africa, where they have no game-keeper, send them quails in clouds, and other birds of passage, which cross the sea in spring, to cover their tables in Autumn. The northern pole, where there are no cruising vessels to protect possessions, pours every summer on their shores, legions of mackerel, of cod, and of turbots, fattened during its long nights.

Not only the fishes and the birds, but the very

Trees

themselves, change from their climate. Their orchards were formerly transplanted from Asia, and, now, their parks come from America. In-

stead of the chesnut and walnut, which surrounded the farms of their vassals, in the rustic domains of their ancestors, the ebony, the sorb-apple of Canada, the great chesnut of India, the magnolium, the tulipfera, incircle their villas with the groves of the new world, and, soon, of its solitudes. They have made the Jasmin come to them from Arabia, the orange from China, the anana* from Brazil—and their atmosphere is filled with the perfumes of every region of the torrid zone. They need no suns: they form climates as they please. In their hot-houses they can give to foreign plants the heats of Syria, even at the very season that peasants are perishing with alpine frosts in their thatched-roofed hovels. None of the productions of Nature are denied them. What they cannot procure alive, they have when dead. The insects, birds, shell-fish, animals—nay, the very soil of the most distant lands, enrich their cabinets. Painting and engraving present them with the prospect, and procure them the enjoyment of the Glaciers of Switzerland, during the burning heat of the dog-days, and of the spring of the Canary islands in the middle of winter. The intrepid mariner brings them, from regions into which the arts dare not penetrate, journals of voyages, still more interesting than the productions of the pencil; and increases the

* The pine-apple.

silence, the tranquility, the security of their nights: sometimes by a recital of the horrible tempests of Cape-Horn: sometimes, by that of the dances of the happy islanders of the south sea.

Obscure scholars, by labors which nothing can recompence, have for them procured the knowledge of the sublime

Geniuses

who were ornaments of the world in times nearer to its creation: Orpheus, Zoroaster, Æsop, Lockman, David, Solomon, Confucius, and a multitude of others, unknown to antiquity itself. It is no more for the Greeks, it is for them that Homer still sings of heroes and of gods; and that Virgil warbles the notes of the Latin flute, which enchanted the court of Augustus, and called back to it the love of country and of Nature. It is for them that Horace, Pope, Addison, La Fontaine, Gesner, have smoothed the rough paths of wisdom, and have even rendered them more accessible, and more lovely than the treacherous precipices of folly.

A multitude of poets and historians of all nations: Sophocles, Euripides, Corneille, Racine, Shakespeare, Tasso, Zenophon, Tacitus, Plutarch, Suetonius, introduce them into the very closets of those terrible potentates who bruised, with a sceptre of iron, the head of the nations whose happiness was entrusted to their care, lead-

ing them to rejoice in their peaceful destiny, and to hope for a better still, under the reign of another Antoninus. Those vast geniuses of all times, and of all places, celebrating, independent of each other, the immortal lustre of virtue, and the providence of heaven in the punishment of vice, add the sanction of their sublime intelligence to the universal feeling of mankind, and multiply in one favor a thousand and a thousand times—the hopes of another life, more lasting and more happy!

Seems it not that, a chorus of praise ought to ascend day and night from the roofs of our dwellings to the Author of Nature? never did ancient king of Asia, Susa, or Ecbatana, possess so many enjoyments as our common citizens do in Paris. Nevertheless, every day, these monarchs worshipped the gods. They would engage in no enterprise, without consulting the gods; nor even sit down to table before they had poured out libations, in religious acknowledgment.

END OF THE SECOND STUDY.

Third Study.

GEOGRAPHICAL.

LET us consider the form of the basin of the

Ocean.

Two principal currents cross it: the one from east to west, the other from north to south. The first, coming from the south pole, puts in motion the seas of India, and, directed by the eastern coast of the old continent, runs from east to west, and from west to east, in the course of the same year; forming in India what is called the *Monsoons*. We may remark, that all the bays, creeks, and mediterraneans * of Southern Asia, such as the Gulphs of Siam and Bengal, the Persian Gulph, the Red Sea, and a great many others, are directed relatively to this current, so as not to be stemmed by it.

In like manner, the second current, issuing from the north pole, gives an opposite movement to our ocean, and inclosed between the continent of America and our own, that is, Europe, proceeds from north to south, and returns

* Seas surrounded by land.

from south to north in the same year, forming like that of India, real Monsoons, though little observed by navigators. All the bays and mediterraneans of Europe—as the Baltic, the Channel, the Bay of Biscay, the Mediterranean, usually so called; and all those on the eastern coast of America—As the Bay of Baffin, Hudson's bay, the Gulph of Mexico, and many others which might be mentioned, are directed relatively to this current, east and west.

It is because of the calmness of

Bays,

resulting from their situations with respect to the currents, that, so many vessels run thither in quest of anchorage; and it is for this reason, also, that Nature has placed in these the mouths of most rivers, as we before observed, that their waters might be discharged into the ocean without repercussion by its currents. She has employed the same precautions in favor of even the smallest streams that empty themselves into the sea. There is not an experienced seaman who does not know that there is scarcely a creek but what has its rivulet. But for the wisdom apparent in these dispositions, the streams destined to water the earth must frequently inundate it.

Nature employs still other means for securing the course of rivers, and especially for protecting

their discharges into the sea. The chief of these are

Islands.

Islands present to the rivers channels of different directions: so that if the winds, or the currents of the ocean should block up one of their outlets, the waters may flow through another. It may be remarked that she has multiplied islands at the mouths of rivers, the most exposed to these two inconveniences: such, for example, as that of the Amazon, which is for ever attacked by the east wind, and situated on one of the most prominent parts of America. There they are so many in number, and form with each other such different courses, that one of their openings points north-east, and another south-east, and from the first to the last, the distance is upwards of one hundred leagues.

Fluviatic, or river, islands are not formed, as is commonly believed, by substances washed down by rivers, and amassed: they are, on the contrary, for the most part, very much elevated above the level of these rivers, and many among them contain rivers and mountains of their own. These elevated islands are, besides, frequently found at the confluence, or union, of a smaller and greater river. They serve to facilitate their communication, and to open a double passage to the current of the rivulet. Whenever you see islands in the

channel of a great river, you may be assured that there is some lateral inferior river, or rivulet, in the neighborhood.

There are, in truth, many of these confluent rivulets which have been dried up by the imprudent labors of men; but you will always find, opposite to the islands which divided their confluence, a correspondent valley, wherein their ancient channel may be traced. There are likewise some of these islands in the midst of the course of the rivers, in places exposed to the winds. I shall observe, by the way, that we err extremely respecting the intentions of Nature, in re-uniting the islands of a river to the adjoining continent; for its waters, in this case, can only flow through one channel, and when the winds happen to blow contrary to the current, they can escape neither to the right nor to the left: they swell, they overflow, they inundate the fields, throw down the bridges, and occasion most of the ravages which are now so frequent in our cities.

It is not then bays or gulfs that we find at the extremities of the currents of the ocean; it is, on the contrary, islands. At the extremity of the great eastern current of the Indian ocean is placed the island of Madagascar, which protects Africa against its violence. The islands of the Terra del Fuego defend, in the same manner, the southern extremity of America, at the con-

fluence of the eastern and western currents of the south seas. The numerous Archipelagos of the Indian and southern oceans, are found about the line, where the two general currents of the north and south seas meet. It is with islands, too, that Nature protects the opening of bays and mediterraneans.

England, Scotland, and Ireland

cover that of the Baltic; the islands of Welcome and Good Fortune, Hudson's bay; the island of St. Laurence, the entrance of the gulf of that name; the chain of the Antilles, the gulf of Mexico; the isles of Japan* cover the double gulf, formed by the peninsula of Gorée, with the neighboring countries. All currents bear upon islands. Most of these are, for this reason, noted for their high seas, and their raging winds: such are the Azores, the Bermudas, the island of Tristan, of Acunhah, *&c.* It is not that they contain within themselves the causes of these, but that they are placed at the focuses of the revolutions of the ocean, and even of the atmosphere, for the purpose of weakening their effects. They are in positions nearly similar to those of the

* Japan should be called Gep-uen: *the birth of the Sun:* so named by the opposite people who, seeing the sun rise every morning among these islands, believed it really came from them.

capes, which are all celebrated for the violent tempests which beat upon them: as Cape Finisterre, at the extremity of Europe; the Cape of Good-Hope, at that of Africa; and Cape Horn, at that of America. It is from this that the sea proverb is derived, *double the Cape:* that is, to surmount some great difficulty. The ocean, accordingly, instead of bearing upon the retiring parts of the continent is directed upon those which are most prominent: and it must soon have destroyed these, had not Nature fortified them in an admirable manner.

The western coast of Africa is defended by a long bank of sand, on which the billows of the Atlantic Ocean, are perpetually breaking. Brasil, along the whole extent of its coasts, opposes to the continual winds from the east, and to the current of the sea, a prodigious rampart of rocks, more than a thousand leagues long, twenty paces broad, at the summit, and of an unknown thickness at the base. This bank is at a musquet-shot distance from the beach. The sea entirely covers it at high water, and on the retreating of the tide it presents itself with the elevation of a peak. This dike is composed of one piece lengthwise, as has been ascertained by repeated trials; and it would be impossible for a vessel to get into Brasil, had not Nature made openings in several places, through which our vessels go in and out.

Go from the south to the north, you will always find equivalent precautions. The coast of Norway is defended in nearly the same manner as that of Brasil. Pontoppidan tells us, that this coast, which is nearly three hundred leagues in length, is, for the most part, steep, angular, and over-hanging; so that the sea, in many places, has a depth of no less than three hundred fathoms close in shore. This has not prevented Nature from protecting these coasts by a great number of isles, great and small. "By such a rampart," says this author, "which consists of perhaps a "million or more of massy stone pillars, founded "in the very depth of the sea, the chapiters of "which are only a few fathoms above the sur-"face, all Norway is defended to the west, as "well against the enemy as against the ocean." Behind these species of breaker are found some harbors on the coast, of a similarly wonderful construction. "But, as there is frequently dan-"ger," adds Pontoppidan, "of ships being dri-"ven ashore before they can get into port, from "the winds and currents, which are very violent "in the straits of these rocks and isles, and from "the difficulty of anchoring in so great depth, "government has caused several hundreds of "strong iron rings to be fastened in the rocks, "more than two fathoms above water, by which "the vessels may be moored."

Nature has infinitely varied these means of protection, especially in the islands, which themselves protect the continent. She has surrounded the Isle of France, for example, with a bank of madrepores, which opens only at the place where the rivers of that island empty themselves into the sea. Other islands, as several of the Antilles, were defended by forests of mangliers, which grow in the sea itself and break the violence of the waves by yielding to their motion. It is, perhaps, to the destruction of these vegetable fortifications, that we ought to attribute the irruptions of the sea, now so frequent in several islands, particularly that of Formosa. There are others which consist of pure rock, rising out of the sea like huge moles; such as the Maritimo in the Mediterranean. Others, volcanic, like the Isle of Fuego, one of the Cape-de-Verd islands, and several similar in the South Sea, rise like pyramids with fiery summits, and serve for lighthouses to mariners, by their flame in the night time, and by their smoke by day.

The Maldivia Islands

are protected against the ocean by the most astonishing precautions. In truth they are also more exposed than many others, being situated in the great current of the Indian Ocean, of which mention has been already made, and which passes and repasses twice a year. They are, besides,

so low that they are almost on a level with the water; and they are so small and so numerous, that they have been computed at twelve thousand: and several are so near to each other, that it is possible to leap over the channels from one to another. Nature has first united them in clusters or Archipelagos, separated from each other by deep channels, which go from east to west, and which present many passages to the general current of the Indian Ocean. These clusters are thirteen in number, and extend in a row, from the eighth degree of northern to the fourth degree of southern latitude, which gives them a length of three hundred of our leagues of twenty-five to a degree.

But let us hear the description of their architecture from the interesting and unfortunate Francis Pyrard, who there passed the prime of his life in slavery; for he has left us the best description which we have of these islands, as if it were necessary that, in every case, those things which are most worthy of the esteem of mankind should be the fruit of some misfortune.

"It is wonderful," he says, "to see each of "these clusters encompassed round and round "with a great bank of stone, such as no human "art can pretend to equal, in securing a spot of "ground within its walls. These clusters are all "roundish or oval, and have each a circumfer-

"ence of about thirty leagues; some rather "more, others rather less, and are all in a series, "and end to end, without any contact whatever. "There are, between every two channels of the "sea, some broad, others very narrow. Being "in the center of a cluster, you see all around "that great bank of stone, which, as I have "said, encompasses and defends the isles against "the impetuosity of the ocean. But it is truly "terrible, even to the boldest, to approach this "bulwark, and to behold the billows coming "from a distance, to burst with fury on every "side; for then I assure you, as a thing which I "have seen an infinity of times, the perturbation "or bubbling over exceeds the size of a house, "and is whiter than cotton; so that you see your-"self surrounded by a wall of extreme white-"ness, especially when the sea is high."

Pyrard observes, beside, that most of the isles that are enclosed in these subdivisions are each surrounded by a particular bank, which farther defends them against the sea. But the current of the Indian Ocean, which passes through the parallel channels of these clusters, is so violent, that it would be impossible for the inhabitants to have any intercourse with each other, had not Nature arranged all this in her own admirable manner. She has divided each of these clusters by two particular channels, which intersect them

diagonally, and the extremities of which exactly terminate at the extremities of the great parallel channels which separate them. So that if you wish to pass from one of these Archipelagos to another, when the current is easterly, you take your departure from that in which you are by the diagonal canal of the east, where the water is calm, and you commit yourself, afterward, to the current which passes through the parallel channel, you proceed in a deflecting course to land on the opposite cluster, into which you enter by the opening of its diagonal channel toward the west. The mode of proceeding is reversed when the current changes, six months afterward. Through these interior communications the islanders can, at all seasons, make excursions from isle to isle, the whole length of the chain from north to south, notwithstanding the violence of the currents which separate them.

Every isle has its proper fortifications, proportioned, if I may say so, to the danger to which it is exposed from the billows of the ocean. We have no occasion to suppose tempests, in order to form an idea of their fury. The simple action of the

Trade Winds,

however uniform, is sufficient to give them, unremittingly, the most violent impulsion. Each billow, joining to the constant velocity impressed

upon it every instant by the wind, an acquired velocity, from its particular movement, would form, after running through a considerable space, an enormous mass of water, were not its course retarded by the currents which cross it, by the calms which slacken it, but, above all, by the banks, the shallows and the islands which break it.

A very perceptible effect of this accelerated velocity of the waves is visible on the coasts of Chili and Peru, which undergo, however, only the simple concussion, and repercussion of the waters of the South Sea. The shores are inaccessible through their whole extent, unless at the bottom of some bay, or under the shelter of some island, situated near the coast. All the islands of that vast ocean, so peaceful as to have the appellation of Pacific, are unapproachable on the side which is exposed to the currents, occasioned by the trade winds only, unless where shelves or rocks break the impetuosity of the waves. It is there a spectacle at once superb and terrible, to see the vast fleeces of foam which incessantly rise from the bottom of their dark and rugged windings; and to hear their hoarse roaring noise, especially in the night-time, carried by the winds to several leagues distance.

Islands are not Fragments,

then, separated by violence from the continents. Their position in the ocean, the manner in which

they are defended, and the length of their duration, constitute a complete demonstration of this assertion. Considering how long the sea has been battering them with its fury, they must have been by this time reduced to a total ruin: but at this day, the utmost extremities of Sicily hear, as formerly, the roarings of Scylla and Charybdis.

END OF THE THIRD STUDY.

Fourth Study.

BEAUTY OF THE VEGETABLE WORLD.

MEN of wit, who have never travelled, have amused themselves by describing the world, as it came out of the hands of Nature, as if the giants had been fighting in it. They represent its rivers as flowing here and there at random; its morasses as vast collections of mud; the trees of forests turned upside down; its plains covered with stones, briars and thorns; its paths as impassable; and all its cultivation as the work of human genius. I confess that these pictures, though picturesque, have frequently afflicted me, because they took away my confidence in the AUTHOR of Nature. To no purpose could it be supposed that, in other respects, he had loaded man with benefits: he had forgotten one of our first wants, if he had neglected to take care of our habitation. The

Inundations

of rivers, which have been complained of, such as those of Amazon, of Oroonoko, and a great many others, are periodical. They manure the land which they overflow. We know, besides,

that the banks of these rivers swarmed with populous nations, before any European had formed a settlement there. The inhabitants derived much benefit from these inundations, partly from the abundance of the fisheries, partly from the fertility communicated to the lands. So far from considering them as convulsions of Nature, they received them as blessings from heaven, just as the Egyptians prized the overflowings of the Nile. Was it, then, a mortifying spectacle to them to see their deep forests intersected with long alleys of water, which they could traverse without trouble, in all directions, in their canoes, and pick the fruits at their ease? Nay, certain tribes, such as those of the Orooneko, determined by these accommodations, had acquired the singular habit of dwelling on the tops of the trees, and of seeking there like the birds an habitation, and food, and a fortress. Whatever may be in this, most of them inhabited only the banks of the rivers, and preferred them to the vast deserts with which they are surrounded, though not exposed to inundations. We see

Order

only where corn can grow. The habit which we have acquired of confining the channels of our rivers within dykes and mounds, of gravelling and paving our high roads, of applying the straight line to the walks in our gardens, and to our basons

of water, of squaring our parterres, nay our very trees, accustoms us to consider every thing which deviates from our rectangles, as given up to confusion. But it is in that with which we have interfered that we frequently see real disorder. We cause fountains to play upon the tops of mountains; we plant poplars and limes upon rocks; we plant vineyards in valleys, and meadows upon hills.

Let these laborious atchievements be neglected a little, all these petty levellings will be confounded under the general levelling of continents, and all this culture, the work of Man, disappear before that of Nature. Our sheets of water degenerate into marshes; our green walks of mangled trees disdain the preposterous shapes, into which they have been cut, and burst into luxuriance; every bower is choked, every avenue closes; the vegetables, which are the natural produce of the soil, declare war against the strangers; the starry thistle, and vigorous verbascum, stifle, under their large leaves, the English short grassy sod; thick crops of rye-grass, and trefoil, gather round the trees of Palestine; the briars climb among them with their thorns, as if mounting a breach; tufts of nettles take possession of the urn of the Naiads and forests of reeds spring up in the forges of Vulcan; greenish scales of minium corrode the faces of the Venuses, without paying respect to

their beauty. The trees themselves lay siege to the mansion ; the wild cherry, the elm, the maple mount upon its ridges ; their long roots penetrate into its lofty pediments, and at length obtain the victory over its haughty cupolas. The ruins of a park merit the reflections of the sage, not less than those of an empire: they equally show how weak is the power of man, when he opposes it to that of Nature.

I have not had the felicity, like the primitive navigators, who discovered uninhabited islands, to contemplate the face of the ground as it came from the hand of the Creator; but I have seen portions of it which had undergone alterations sufficiently trifling to shew me that nothing could equal their

Primitive Beauties.

These had an influence over the writers of the first accounts which were given of them; and they communicated them a freshness, a coloring, and a natural grace which I cannot describe, that will ever advantageously distinguish them, notwithstanding their simplicity, from the learned descriptions which have been produced in modern times.

To the influence of these undisfigured landscapes, I ascribe the superior talents of the earliest writers who have painted Nature, and the sublime enthusiasm which an Homer, and an Or-

pheus, have transfused into their poesy. Among the moderns, the historian of Anson's voyage, of those of Cook, Banks, Solander, and some others, have described several of these natural sites in the islands of Tinian, Masso, Juan Fernandez, and Taiti, which have delighted all persons of real taste, though these islands have been in part degraded by the Indians and Spaniards.

I have seen no countries but such as have been frequented by Europeans, and desolated by war, or by slavery: but I shall ever recollect with pleasure two of these natural sites—the one on one side the tropic of capricorn, the other beyond the sixtieth degree of north latitude. Notwithstanding my inability, I am going to attempt a sketch of these, in order to convey, as well as I can, an idea of the manner in which Nature disposes her plains in climates so opposite.

The first was a part, then uncultivated, of the

Isle of France,

of fourteen leagues in extent, which appeared to me the most beautiful portion of it, though the black renegadoes, who take refuge there, had cut down, on the sea-shore, the *lataniers*, of which they make their huts, and, on the mountains, the *palmettos*, whose tops they use as food, and the *liannes*, of which they make fishing nets. They likewise disfigure the banks of the brooks, by digging out the bulbous roots of the *nymphæa*, on

which they live; and even the banks of the sea, where they eat every species of shell-fish, without exception, leaving the burnt shells piled up here and there in large hillocks. Notwithstanding these disorders, that part of the island had preserved traces of its ancient beauty. It is perpetually exposed to the south-east wind, which prevents the forests that cover it from extending quite down to the brink of the sea; but a broad selvage of turf, of a beautiful sea green, which surrounds it, facilitates the communication all around, and harmonises on the one side with woods, and, on the other, with the azure of the waves.

The view is thus divided into two aspects, the one terrestrial, the other maritime. The land prospect presents hills which retire behind each other in the form of an amphitheatre, and whose contours, covered with trees in pyramids, exhibit a majestic profile on the vault of the heavens. Over these forests rises, as it were, a second forest of palmettos, which balance, above the solitary valleys, their long columns, crowned with parti-colored plumes of palms, surmounted with a spiral peak. The mountains of the interior present, at a distance, oval-shaped rocks, clothed with great trees, and pendent liannes, floating like drapery in every breath of wind. Above these, lofty pinnacles arise, round which are continually collected the rainy clouds; and when these are

illuminated by the rays of the sun, you see the colors of the rainbow painted on their peaks, and the rain-water flowing down their dusky sides in brilliant sheets of chrystal, or in long fillets of silver. No obstacle prevents your perambulating the borders which embellish their sides and their bases, for the rivulets which descend from the mountains present along their banks slips of sand, or plates of rock, from which they have washed away the earth. Besides, they clear a free passage, from their source, to the place of their discharge, by undermining the trees which would grow in their channel, and by fertilising those which spring up on their margin; and they leave above them, along all their course, great arches of verdure, which retire in perspective, and which are visible from the shore of the sea. The liannes interlacing about these arches, secure them from the wind, and decorate them most beautifully, by opposing to their foliages, other foliages, and to their verdure, garlands of brilliant flowers, or seed-pods of various colors. If a tree, wasted by age, happens to fall down, Nature, which universally hastens on the destruction of all useless things, covers its trunk with maiden-hair of the most beautiful green, and agarics, waved with yellow, saffron, and purple, which feed on the ruin. Toward the sea-side, the turf which borders the island is up and down sowed with thickets of *latanier*, whose

palms, formed into a fan, and attached to pliant membranes, radiate in the air, like so many verdant suns. These lataniers advance even into the sea, on the capes of the island, with the land fowls which inhabit them; while the small bays swarming with multitudes of sea-fowl, which swim in the water, which are paved, if I may use the expression, with madrepores of the color of peach blossoms; the black rocks covered with rose colored nerits, and shells of every kind penetrate into the island, and reflect, like so many mirrors, all the objects of the land of the heavens. You would imagine that you saw the birds flying in the water, and the fishes swimming among the trees; and you would think of the marriage of Terra and Oceanus, who thus intermingle and confound their domains.

In the greatest part, even of uninhabited islands, lying between the tropics, when the discovery of them was made, the banks of sand which surround them were found to be filled with turtle, which came thither to lay their eggs, and with the scarlet flamingos, which, as they sit on their nests, resemble burning torches. They had, besides, a border of mangliers, covered with oysters, which opposed their floating foliage to the violence of the waves, and of cocoa-trees, loaded with fruit, which advancing into the very sea, along the

breakers, presented to the mariner's eye the aspect of a city, with its ramparts, and its avenues, and announced from afar, the asylum prepared for them by the god of the seas. These different kinds of beauty must have been common to the isle of France, with many other islands, and were, in all probability destroyed by the craving necessities of the first mariners who landed upon them. Such is the very imperfect representation of a country, the climate of which, according to ancient philosophers, was uninhabitable, and the soil of which modern philosophers consider as the scum of the ocean, or of volcanos.

The second rural scenery which I surveyed with rapture, and of which I am going to attempt a description, was in

Russian Finland,

where I was employed, in 1764, on a visitation of its fortresses, with the general of the corp of engineers, in which I then served. We were travelling between Sweden and Russia, and through a country so little frequented that the firs had encroached on the great line of demarkation that separates the two countries. It was impossible to get through in a carriage, and we were under the necessity of employing the country people to cut down the trees, that our equipages might follow us. We were able, however, to penetrate in every direction on foot, and, frequently, on horseback,

though we were obliged to inspect the windings and the crevices of a great number of rocks, in order to ascertain their natural capability of defence; and though Finland is so covered with these, that ancient geographers have given it the name of *Lapidosa*.

Not only are these rocks scattered about in great blocks over the surface of the earth, but the valleys and entire hills, are there, in many places, formed of a single mass of solid rock. This rock is a soft granite, which exfoliates, and whose scurf fertilises the plants, at the same time that the enormous mass shelters them from the north wind, and reflects on them the rays of the sun, by their curves, and by the particles of mica, with which the rock is filled. The bottoms of these valleys were skirted with long borders of meadow, which every where facilitate the communication. In those places where the rock was pure, as originally, there grew in abundance, a plant called by the natives

Kloukva,

which thrives on the rock, and seldom rises higher than a foot and an half; but it spreads in all directions, and to a great distance. Its leaves and verdure resemble that of the box, and its runners are loaded with a red berry, good to eat, and resembling the strawberry.

The Fir,

the birch, and the service-tree throve wonderfully well on the sides of the hills, though, in many places, they found scarcely earth sufficient in which to insert their roots. The summits of the greater part of these rocky eminences were rounded in form of a skull-cap, and rendered quite glistening by the water which oozed across the long crevices that followed them. Many of these skull-caps were perfectly bare, and so slippery that it was difficult to walk over them. They were crowned, round and round, with a broad belt of moss of an emerald green, out of which sprung up, here and there, an infinite multitude of mushrooms of every form, and of every color. Some of them were shaped like large scarlet-colored tweezer cases, studded with dots of white; others were orange-colored, and formed like a parasol; others as yellow saffron, and of the shape of an egg. Some were of the purest white, and so well rounded, that you would have taken them for ivory draughtsmen. These mosses, and these mushrooms, spread along the fillets of water from the summits of the rocky hills, spread in long rays across the woods, with which their sides are covered, and proceeded to skirt their extremities till they were confounded with a multitude of strawberry and raspberry plants. Nature, to indemnify this country for the scarcity of apparent

flowers to please the eye, of which it produces but few, has given their perfumes to several plants such as the *calamus aromaticus*, the birch which in spring exhales a kind of odor of roses, and the fir, the apple of which is sweet scented. She has, in like manner, diffused the most agreeable colors, and the most brilliant flowers on the most common vegetables, such as the cones of the larch, which are of a beautiful violet, on the scarlet grains of the sorb-apple, on mosses, and mushrooms, and even on

Turnip Radishes.

Upon the subject of this last vegetable, hear what has been said by the accurate *Corneille le Bruyn*, in his voyage to Archangel.

"During our residence among them," (the Samoides) "they brought us several sorts of turnips, of various colors, and extremely beautiful. Some of them were violet colored, like our plumbs, grey, white, yellowish, all of them streaked with red, like vermillion, or the finest laca, and as pleasing to the eye as the flower called the *pink*. I painted some of them on paper, in water colors, and sent some to Holland, in a box filled with dry sand, to one of my friends, who is fond of such curiosities. I carried my paintings to Archangel, where no one would believe that they were copied after Nature, till I produced the turnips themselves: a proof that no great attention

is paid there to the rarest and most curious productions of Nature."

I take these turnips to be of the radish sort, the bulb of which grows above ground. At least I presume so, from the drawing itself of Corneille le Bruyn, and from having seen such in Finland: they are, in taste, superior to that of our colewort, and they have a flavor similar to the artichoke bottom. I have produced these testimonies of a painter, and that painter a Dutchman, respecting the beauty of these colored vegetables, to correct the prejudice with which so many are hurried away, that, in the Indies only, the sun gives a magnificent coloring to plants. But nothing, in my opinion, equals the beautiful green of the plants of the north in spring. I have frequently admired in particular that of the turf, and of the mosses, some of which are glazed with violet and purple. The solemn firs themselves then burst into festoons of beautiful green; and when they come to throw from the extremity of their branches the yellow tufts of stamina, they appear like pyramids, covered all over with little lamps.

We encountered no obstacle in traversing these forests: sometimes there lay in the way an aged birch, laid low by the hand of time, and worm-eaten, but in stepping upon the rind, it supports you like a piece of thick leather; the wood of

these birches decays very fast, and their bark, which no humidity is able to corrupt, is carried away on the melting of the snows into the lakes, where it swims about all in one piece. As to the firs, when they fall, humidity and the mosses consume them in a very little time. This country is intersected with great

Lakes,

which every where present new means of communication, as they penetrate far into the land by their branching gulfs, and exhibit a new species of beauty, by reflecting in their still waters, the openings of their vallies, the mossy hills, the overhanging firs, bending from the promontories over their shores.

It would be no easy matter to describe the hospitable reception which we found in these northern regions; the people exerted themselves in every possible way to detain us among them for many days together: they sent to the distance of ten or fifteen leagues, invitations to their friends and relations, to come and assist them to entertain us. The days and the nights passed away in festivity. In the cities, the principal inhabitants regaled us by turns. Amid this hospitable conviviality, we made the tour of the cities of Finland, that region of poverty, Wiburg, Villemanstrand, Fredericsham, Nislot, *&c.* The castle of this last town is situated on a rock at the discharge of Lake Kie-

men, which surrounds it with two cataracts. From its platforms you perceive the vast extent of that lake. We dined in one of its four towers, in a small apartment, illuminated by windows like gun-ports. It is the very apartment in which the unfortunate *Ivan* was so long confined, who descended from the throne of the Russian empire at the age of two years and a half. But this is not the place to expatiate on the influence which moral ideas may diffuse over landscapes.

Plants:

These are not scattered about at random over the earth; and though nothing has yet been said respecting their general arrangement in various climates, this simple sketch is sufficient to shew that there is order in their combination. If we examine, in like manner, even superficially, their developement, their attitude, and their magnitude, we shall see that there is as much harmony in the aggregation of their component parts, as in the aggregation of their species. It is impossible, in any one respect, to consider them as the mechanical productions of heat and cold, of dryness and humidity; all these causes, united, could not have determined the figure of a single moss. In order to be convinced of this, let us begin with the

Circulation of the sap of Plants.

It has been laid down as an indubitable principle that, their saps ascend through the wood, and

re-descend through the rind. To the experiments which have been detailed in proof, in support of this opinion, I shall oppose only the instance of a great chesnut tree, in the garden of the *Thuilleries*, near the terrace of the *Feuillants*, which, for twenty years past, has had no bark round its under part, and which, notwithstanding, is in perfect vigor. Many elms on the *Boulevards* are in the same state. On the other hand, we have seen old hollowed willows, which have not a bit of good wood left. Besides, how is it possible to apply this principle of vegetation to a multitude of plants, some of which are composed entirely of tubes, and to others which have no rind, being inclosed only with dry pellicles?

Neither is there more truth in the supposition, that they rise in a perpendicular line, and that to this direction they are determined by the action of columns of air. Some, it must be allowed, do follow this direction, as the fir, the stalk of corn, the reed; but a much greater number deviate from it, such as creeping plants of every species, vines, liannes, French beans, *&c.* Others ascend vertically, and having arrived at a certain height, in an air perfectly unobstructed, they fork into various tiers, and extend their branches horizontally, as the apple tree: or they incline them toward the earth, as the fir: or hollow them in

form of a cup, as the saxifrage: or round them into a mushroom's head, like the pine, or straiten them into a pyramid, like the poplar; or roll them as wool on the distaff, like the cypress; or let them float at the discretion of the wind, like the birch.

All these attitudes may be seen under the same bearing of the wind. Nay, there are some which assume forms which the gardener, with all his art, would have much trouble to give them. Such is the *badamier* of the Indies, which grows up into the form of a pyramid, and has it divided into stories, like the king of the chess-board. There are plants, uncommonly vigorous, which, far from rising upward, always creep upon the ground. Such is the false potatoe of India, which loves to crawl along the sand of the shores in hot countries, covering whole acres in its progress. Such, too, is the *ratan* of China, which frequently grows in similar situations. These plants do not crawl from weakness. The scions of the *ratan* are so strong that the Chinese make cordage of them for their shipping; and when they are on the ground, they serve as a trap for the deer, who find it impossible, with all their strength, to disengage themselves.

Plants, it has been said, are mechanical bodies. Try, then, to make a body so slim, so tender, so fragile, as that of a leaf, which shall resist, for

whole years, the winds, the rains, the keenest frost, and the most ardent sun! A spirit of life, independent of all latitudes, governs plants, preserves, and re-produces them. Their wounds are healed, and their scars are covered with a new rind. The pyramids of Egypt are crumbled into powder, and the grasses of the times of the Pharaoh's still subsist. How many Greek and Roman sepulchral monuments, the stones of which were rivetted with iron, have, one after another, disappeared! Nothing remains around their ruins, except the cypresses which shaded them.

It is

The Sun,

they say, who gives and who maintains the existence of vegetables. But this prime mover of Nature, all powerful as it is, is not the only and determing cause of even their expansion. If it be true that in our climates the heat of the sun invites the great number of flowers to open, in others it obliges them to close. Such are, of this last description, the great night-shade of Peru, and *arbor tristis*, of the Moluccas, which flower only in the night-time. Nay, his remoteness from our hemisphere does not destroy in it the power of vegetation. It is in winter that the greater part of the mosses grow, which clothe rocks with an emerald green, and that the trunks of the trees are covered, in humid situations,

with plants imperceptible to the naked eye, called *minium* and *lichen* which make them appear, when glazed with ice, like columns of green bronze. These vegetations, in the coldest times of winter, destroy at once all our reasonings respecting the universal effects of heat, as plants of an organization so delicate *seem* to need, for their expansion, the softest temperature. Again; the

Fall of the Leaf

itself, which we have been taught to believe an effect of the sun's absence, *is not occasioned by cold.* If the palm retains its foliage all the year round in the south, the fir is equally an evergreen in the north. The birch, it is true, the larch, and several other species of trees, shed their leaves in northern climates on the approach of winter, but a similar depredation is likewise made on other trees to the southward. It is the resinous substance, we are told, which preserves the foliage in the north; but the larch which is likewise a resinous tree, does not in like manner retain its leaves; whereas the filaria, the ivy, the privet, and many other species, which are not resinous, continue with us in full verdure at all seasons.

Without recurring to mechanical causes, the effects of which always contradict those who attempt to prove them general, why may we not,

in the variableness of vegetation, discover the constancy of

Providence?

Providence has given trees always green to the south, and has clothed those trees with a broader foliage, to shelter animals from the heat. Providence has likewise befriended animals in giving them there a covering with very little hair, which is, consequently, cool; and he has covered the earth which they inhabit, with ferns and green *liannes*, that it may be always refreshing to them. In the mean time, the same Providence has not forgotten the wants of the animals of the north. The ever-green firs are spread as a roof over their heads, whose lofty and tufted pyramids ward off the snow from their roots, and whose branches are so well furnished with long grey mosses, that the trunk is almost invisible; for a bed, a bank of moss is accumulated upon the ground, in many places of more than a foot in thickness; and the soft and dry leaves, *which fall precisely at the approach of the inclement season*; finally, their provision, too, is laid up in store, namely, the fruits of those very trees which have then arrived at their full maturity. To these are added, here and there, the scarlet clusters of the sorb-apple, which sparkling from afar, over the whiteness of the snows, invite the birds to an asylum; so that the partridge, and the moor-cock, every species of

snow-birds, and the hare and the squirrel, frequently find, under the shelter of the same fir, a lodging, food, and warm shelter.

But one of the greatest blessings of Providence to the animals of the north is the cloathing them with furred garments of long and thick hair, which regularly grow in winter, and fall off in summer. Naturalists, who consider the hair of animals as a species of vegetation, are at pains to account for this growth and decay from the influence of heat. They pretend to support their system by the instance of the human hair and beard, which grow rapidly in summer. But I would ask them—How it comes to pass that, in cold countries, horses, which in summer are black and smooth, assume in winter a long and shaggy coat like the fleece of a sheep? To this they reply—It is the internal heat of their body, increased by the external action of the cold, which produces wonderful phenomena. Very well: but I am under the necessity of observing, that cold does not produce this effect on the human beard and hair; for it retards their growth; that, besides in the case of animals, on which Providence bestows a clothing peculiarly warm, the hair is much longer and thicker on those parts of the body which have the least natural heat; such as the tail, which is very bushy, in horses, martens, foxes and wolves; and that this hair is short and

thin on those parts of them which have most natural heat, as the belly. Their backs, their ears, and frequently their very paws, are the parts most amply furnished with hair. But I satisfy myself with opposing this last objection: the external and internal heat of an African lion ought surely to be as ardent, at least, as that of a Siberian wolf; whence is it, then, that the first is smooth as if newly shaven, whereas the other is shagged up to the eyes? The

Cold,

which we have been taught to consider as one of the greatest obstacles of vegetation, is as necessary to certain plants as heat is to others. If those of the South could not thrive in the North, those of the North could not succeed better in the South. The Dutch have made many a vain attempt to make the fir grow at the Cape of Good Hope, in order to produce a supply of ship masts, which sell at a very high price in India. Many planters in the *Isle of France*, have made attempts equally fruitless, to raise in that island the lavender, the daisy, the violet, and other plants of our temperate climate. Alexander, who transplanted whole nations at his pleasure, could not, with all his efforts, make the ivy of Greece grow in the vicinity of Babylon: though he was very ambitious of acting, in India, the character of Bacchus, in every particular.

I am persuaded, however, that it might be possible to succeed in effecting these vegetable transmigrations by employing

Ice

in the south, for the propagation of northern plants, as we employ stoves in the north in the propagation of the plants of hot climates. I do not believe that there is a single spot on the globe in which we could not, with a little address and industry, procure ice as easily as we procure salt. In the whole course of my travels, I never met with a temperature more sultry than that of the island of Malta; though I have twice crossed the line, and have passed a considerable part of my life in the Isle of France, where the sun is vertical twice a year. The soil of Malta consists of little hills of white stone, which reflect the rays of the sun with so much force, that the eye sight is sensibly affected by it; and when the wind from Africa, known by the name of *Syroco*, which issues from the sands of Zara, on its way to melt the ice of the north, comes to pass over that island, the air is as hot as the breath of an oven. I recollect a figure of Neptune in Bronze, upon its shore, the metal of which, at that season, was heated to such a degree that you could scarcely apply your hand to it. The Maltese, however, imported snow into the island, from Mount Etna, which is sixty leagues distant; they kept it for

months together, laid on straw, in vaults; and it was to be bought for a farthing a pound weight, notwithstanding it was farmed out. Since, then, they can have snow at Malta, in the dog-days, I believe that it might be had in every country in the world. Besides, Nature, as we have seen, has multiplied icy mountains in the neighborhood of hot countries. I may, perhaps, be reproached for having indicated here the means of increasing luxury: yet since the common people only live, at present, upon the luxury of the rich, I may be readily excused; but my intention is only to promote the science of Nature.

It cannot be that cold is the enemy of all plants, for, in the North, we find forests of the tallest growth, and of the greatest extent of any in the world. It is at the feet of the eternal snows of Lebanon that the cedar, the king of the vegetable world, rises in his full majesty. The fir which, next to the cedar, is the largest tree of our forests, does not rise to its prodigious altitude but on icy mountains, and in the cold climates of Norway, and of Russia.

Before I had travelled in northern countries I figured to myself, according to the laws of our naturalists, that the earth there must be stripped of all its vegetables by the rigor of the cold. I was greatly astonished to see there the largest

trees that I had ever seen in my life, and so thickly spread, that a squirrel could easily traverse the greater part of Russia without setting a foot upon the ground, by springing from branch to branch. This forest of firs covers Finland, Estonia, the whole space comprehended between Petersburgh and Moscow, and thence extends over a great part of Poland, where oaks begin to grow, as I have myself observed in travelling through these countries. But, after all, what I have seen was only the smallest part, for it is known, that the forest extends from Norway even to Kamschatka, some sandy deserts excepted; and from Breslau as far as the shores of the frozen sea.

END OF THE FOURTH STUDY.

Fifth Study.

FISHES.

In the preceding Study the *habitation* of man is shewn to have been provided with infinite goodness and wisdom:

> Challenging human scrutiny; and proved
> Then skilful most, when most severely judged.

Our proofs of this have been adduced from what are freely called 'inhospitable climes;' at present, we are going to shew, from facts related of the same parts of the world, that, Providence has not been less bountiful in the provision of our food.

In speaking of the fruitfulness of northern regions, it would be easy to dwell upon the numerous chaces of elks, rein-deer, water fowls, heath-cock, hares, white bears, wolves, foxes, martens, ermines, beavers, *&c.* which the inhabitants of northern countries annually carry on; the mere furs of which, besides their own wants, produce them a very considerable branch of commerce with all Europe; but I shall pass over these, and stop only at their fishery; because this gift of the waters, presented to all nations, is no where so abundant as in the North.

From the rivers and lakes are drawn prodigious multitudes of fishes. *John Schæffer*, the accurate historian of

Lapland,

says, that there is every year taken, at Tordeo, full thirteen hundred boat loads of *salmon*; that the *pikes* there are so large, that some are as long as a man; and that every year the Laplanders salt a sufficient quantity for the support of four kingdoms of the North. But these plentiful supplies are nothing when compared to the fisheries of the seas. It is in the bosom of these that the monstrous

Whale

is taken. This fish is, commonly, sixty feet in length, twenty feet broad over the body, and, at the tail, eighteen feet high, and yields an hundred and thirty barrels of oil. The fat is two feet thick, and in cutting it off it is necessary to use great knives six feet long.

From the seas of the north immense shoals of fishes annually take their departure, and enrich all the fisheries of Europe. Among these are cod, anchovies, sturgeon, dory, mackarel, pichards, herrings, sea-dogs, belugas, sea-calves, porpoises, puffers, sea-unicorns, saw-fish, *&c.* The size of all these is more considerable than the fish of temperate latitudes; and they are divided into a greater number of species. The number of

the species of *whales* have been counted as far as twelve, and *plaice* are caught in those seas of the weight of four hundred pounds. I shall confine myself, however, to those sorts of fish which are most known; such as herrings. It is an incontestible fact that the seas of the north send out every year a quantity of these fish that is more than sufficient to feed all the inhabitants of Europe. If then there be want, hunger, and scarcity of provisions, do not blame Nature.

We have documents which prove that the

Herring Fishery

was carried on so far back as the year 1163, in the straits of Sunda, between the islands of Schonon and Seeland. *Philip de Mésières*, governor under *Charles* VI. relates, in the '*Dream of an old Pilgrim*,' that in 1389, in the months of September and October, there was in these straits a quantity of herrings so prodigious, that "for the space of many leagues," he says, "you might have cut them with a sword; and it is matter of common notoriety, that there are forty thousand boats employed during two months, in nothing but the draught of herrings; each boat containing at least six persons, and many ten; and besides these, there are five hundred vessels, large and small, which are employed in picking and salting these herrings in barrels." He makes the number of persons employed in these fisheries amount

to three hundred thousand, Prussians and Germans. In 1610, the Hollanders, who carry on the herring fishery still farther to the north, where the fish is better, employed in it three thousand vessels, and fifty thousand fishermen, without reckoning nine thousand other vessels, employed in barrelling and conveying the cargoes to Holland; and an hundred and fifty thousand men, at sea and on shore, occupied in carrying, purchasing and selling again. They derived from it, then, a revenue of two millions, six hundred and fifty thousand pounds sterling. I myself witnessed, at Amsterdam, in 1762, the joy of the people, which was expressed by displaying streamers and flags over the shops where herrings were exposed to sale, on the first arrivals; and in every street this was the case. I have heard it said that their company formed for this fishery was richer, and contributed more to the sustenance of mankind, than their East-India company. The Danes, the Norweigans, the Swedes, the Hamburghers, the English, the Irish, and some traders of the ports of France, as that of Dieppe, send vessels to this fishery, but in too small number for a manna so easily gathered.

In 1782, at the mouth of the Gothela, a little river which washes the walls of Gottenburg, the people salted one hundred and thirty-nine thousand barrels; smoked three thousand and seven

hundred, and extracted two thousand, eight hundred and forty-five barrels of oil from those which they could not keep. The gazette of France, which gave an account of this fishery, remarks, that previous to the year 1752, these fish had never appeared during a space of seventy-two years. I attribute their abandonment of that coast to some naval combat which had driven them away with the noise of artillery, as happens with the turtles of *Ascension-island*, who forsake the road for many weeks, if a vessel passing by discharge her guns. The case of the herrings might be, perhaps, accounted for from some conflagration of the forests which had destroyed the vegetables that invited the fish to the coasts.

The good bishop of Berghen, *Pont-Oppidan*, the *Fenelon* of Norway, who introduced into his popular sermons whole tracts of natural history, as excellent pieces of theology, relates, that when the herrings coasted along the shores of Norway, "The whales pursue them in great numbers, and throwing their water-spouts into the air, give to the sea, at a distance, the appearance of being covered over with smoking chimnies. The herrings, in order to elude their pursuers, throw themselves close in shore, into every little bay and creek, where the water, before tranquil, forms considerable swellings and surges wherever they could make their escape. They come in such

quantities that you may take out baskets-full, and the country people can even catch them with the hand." After all, however, that the united efforts of all these fishers can effect, hardly any impression is made upon their general column, which coasts all along Germany, France and Spain, and stretches as far as the straits of Gibraltar; devoured as they go along by innumerable multitudes of other fishes and sea-fowls, who follow them night and day, till the column is lost upon the shores of Africa, or returns, according to some authors, to the northern climates.

For my own part, I no more believe that the herrings return to the northern seas, than that the fruits re-ascend the trees from which they have fallen. Nature is so magnificent in the feast which she prepares for man, that she never presents the same dishes twice. I presume, according to an observation of Father *Lamberti*, a missionary in Mingrelia, that these little fishes accomplish the circuit of the Mediterranean, and that the extreme boundary of their emigration is the extremity of the Black Sea; I suppose, and this with the more foundation, because the *pilchards*, which come from the same places, follow the same track; as is proved by the copious fisheries of them, carried on along the coasts of Provence and Italy. "One sometimes sees many herrings," says Father *Lamberti*, "in the Black Sea; and

in the years when this happens, the inhabitants draw a favorable presage of an abundant sturgeon-fishery; and they form a contrary expectation when the herrings do not appear. There was seen in 1642, so great a quantity, that the sea having thrown them on the shallows that separate Trebisond from the country of the Abcasses, the whole coast was covered and surrounded with a bank of herrings that was, at least, three hand-breadths in height. The people of the country apprehended that the air would be infected by the corruption of these fishes; but they presently saw the coast covered with crows and rooks who delivered them from their fears, by eating the fish. The country people talk of a similar event having happened before; but then the quantity was not so great."

This prodigious number of herrings is certainly astonishing; but our admiration will be redoubled if we consider that the column here spoken of is not half of that which issues every year from the north. This column divides at the extremity of Iceland; and while one part comes to spread abundance on the coasts of Europe, the other goes to carry it to those of America. Anderson says, that herrings are so numerous on the coasts of Iceland, that a shallop can scarcely force its way through them even with the assistance of

oars. They are accompanied by a prodigious number of pilchards and cod, which renders fish so common in that island, that the inhabitants dry them and reduce them to meal with grind-stones to feed their oxen and horses. Father *Rale*, a jesuit missionary in America, speaking of the people who live between Acadia and New England, says, that "they resort at a certain season, to a river at a little distance, where during a month the fishes force their way up in such great quantity that, had they hands sufficient, they might fill fifty thousand barrels in a single day. It is a species of very large herring, very agreeable to the taste when fresh. They are pressed one upon another to a foot in thickness, and are taken out in pails-full, like water. The people dry them in eight or ten days, and live upon them during the whole time of seed-sowing."

This testimony is confirmed by a great many others, and particularly by a gentleman of English family, born in America, who has written the history of Virginia: "In the spring," he says, "herrings come up the rivulets and fords of rivers in such quantities that, it is almost impossible to pass on horseback without trampling on these fish. Hence it comes to pass that, at this season of the year, those parts of the rivers where the water is fresh, are infected by the fish that is in them. Beside herrings, may be seen

an infinite number of shad, roach, sturgeon, and few a lampreys, which pass from the sea into the rivers."

It would appear that, another column of this fish issues from the north pole toward the east of our continent, and passes through the channel which separates America from Asia: for a missionary says that, the inhabitants of the land of Yasso go to sell at Yap-an, herrings, among other dried fish. The Spaniards, who have attempted to make discoveries to the north of California, have found all the people of those nations to be fish-eaters, and totally regardless of agriculture. Though they have landed among them only in the middle of summer, before the fishing season, perhaps, had commenced, they found prodigious quantities of pilchards; the native country and emigrations of which are the same as those of herrings, for vast quantities, of a smaller size, are taken at Archangel. I have eaten of them in Russia, at the table of M. the Mareschal *Munich*, who called them *anchovics of the north*.

But as the northern seas which separate America from Asia are unknown to us, I shall follow this fish no farther. I must, however, observe, that more than half these herrings are full of eggs, and if the multiplication of them were to go on uninterruptedly, for a little time only, the whole ocean would not be capable of containing them.

I have been rather diffuse on the subject of this fish, not for the sake of our commerce, which, by its offices, its bounties, its privileges, its exclusions, renders every thing scarce with which it interferes; but for the sake of the subsistence of the common people, who are reduced in many places to eat nothing but bread, while Providence gives to Europe fishes, and those perhaps the most delicate that the sea produces with a hand so liberal*. We must not judge of their delicacy from those which are brought to London or Paris, at the latter end of the season, and which are caught close to our temperate coasts, but from those which are caught in the north, known in Holland by the name of pickled herrings, which are thick, long, fat, having the flavor of a nut, so delicate and so juicy, that they would melt away in cooking, and are eaten raw from the pickle, as are anchovies.

The South Pole

is not less productive of fish than the north. The people who are near it, such as the inhabitants of the islands of Georgia, of New Zealand, of Maire's Strait, of the Terra del Fuego, and of Magellan's Strait, live on fish, and practise no kind of agri-

* More than one epicure has already made this observation; but let us attend to another which strikes but few people: in all cases, and in all countries, *the most common things are the best.*

culture. That honest navigator Chevalier *Nurbrught*, says, in his journal kept in the south-sea, that Port-Desire, which is in forty-seven degrees, forty-eight minutes, south latitude, is so full of penguins, sea-calves, and sea-lions, that every vessel which touches there may find plenty of provisions. All these animals, which were very fat, live only upon fish. When the Chevalier was in Magellan's Strait, he caught, at a single draught of the net, more than five hundred large fishes resembling mullets, as long as the leg of a man; smelts twenty inches long, a large quantity of fish resembling the anchovy; in short, he found such abundance of all kinds, that his people ate nothing else during their whole stay. The beautiful mother-of-pearl shells, which are known in our cabinets under the name of Magellan oyster, are there of prodigious size and excellent eating. The lempit, in like manner, is there very large. "There must be," he says, "an infinity of fish upon those shores to nourish the sea-calves, the penguins, and other birds, which live entirely on fish, and which are all very fat, notwithstanding that their number exceeds all calculation. We one day killed four hundred sea-lions in the course of half an hour. Some of these are eighteen feet long. Those of fourteen feet swarm by thousands. Their flesh is as tender and as white as that of a lamb; and is very good when fresh, but

is still better when it has been a little time in salt." Upon this subject I shall observe, that it is only the fish of cold countries that takes salt well, and that retains in its corned state a part of its flavor. It appears that Nature has desired, by this means, to communicate to all the people of the earth the abundance of fishes that issue from the frozen zones.

END OF THE FIFTH STUDY.

Sixth Study.

ON SOME OF THE EVILS OF HUMAN LIFE.

The fond complaint, my song, disprove,
And justify the laws of Jove!

Gray.

It has been demanded—Why should *Beasts of Prey* exist? They are exceedingly useful. Were it not for these the earth would be covered with the dead bodies of animals. Every year, one twentieth, at least, of quadrupeds perishes; a tenth part of birds; and an infinite number of insects; most of the species of which live only a single year. There are even insects who live but for a few hours, such as the *ephemera*. As the rains carry down all these spoils to the rivers, and as the rivers convey them to the shores of the sea; it is there, chiefly, that Nature has assembled the animals who devour them. Most ferocious beasts descend by night from the mountains, and direct their researches toward the shores. There are even many classes which are expressly created for those places: such are amphibious creatures: as white bears, otters and crocodiles. It is particularly in hot countries, where corruption is most

rapid and most dangerous, that Nature has multiplied carnivorous animals. Tribes of lions, tygers, leopards, panthers, civet cats, ounces, hyenas, condors, &c. resort thither, and join those of wolves, foxes, martens, jackalls, vultures, &c. Legions of voracious crabs are nested in their sands; caimans and crocodiles lie in ambush among their reeds; shell-fish of innumerable species, armed with instruments fit for sucking, for piercing, for filing, and for bruising, are ranged upon their rocks, and pave the borders of their seas; clouds of sea-birds, hover with loud cries, over their shallows, or sail round them, at the discretion of the waves, in quest of food; the lamprey, the becune, the carrang, and the whole species of cartilaginous fishes, which live wholly on flesh; such as the hygians, the long sharks, the broad thorn-backs, the slippers, the polipuses, armed with air-holes, and all the variety of sea-dogs, swim there in crowds, constantly employed in devouring the wrecks of bodies thrown upon their shores.

Beasts of prey are not objects of terror to man. In the first place, there are few that come out in the day-time. They have all striking characters, which announce their approach even before they can be perceived. Some have strong odors of musk, as the marten, the civet, and the crocodile; others piercing voices, which are heard in

the night at a great distance, as wolves and jackals; others have streaks of harsh colors that are perceptible a great distance, on the yellow ground of their skin; and all have eyes that shine in the dark. Nature has given a part of these general signs to the carnivorous and blood-sucking insects: such are the wasp, whose principal color is yellow, and whose body has rings of black like the tiger and the gnat, spotted with white upon a dark ground, who announces his approach by a loud buzzing. Even those which attack the human body are furnished with remarkable indications. They have either strong odors, as the bug; or oppositions of color to the places on which they fix, as white insects, on the hair; or the blackness of fleas on the whiteness of the skin.

Many writers have cried out upon the cruelty of ferocious beasts, as if our cities were liable to the invasions of wolves, or as if the lions of Africa were, from time to time, making incursions into European settlements. On the contrary, they all avoid the neighborhood of man, and, as I have before said, the greater part roam only in the night. These habitudes are unanimously attested to by naturalists, hunters, and travellers.—When I was at the Cape of Good Hope, *M. de Tolbach*, who was governor, told me that lions were formerly common in that country; but that, since the Dutch were established there, it

would be necessary to go fifty or sixty leagues up the continent, before one could be found.

After all, what imports their ferocity to us? Have we not arms which they cannot resist, and have we not sagacity superior to all their cunning? But if we had not these, still Nature has given us dogs capable of subduing them: and she has adapted their different species in an admirable manner to the degrees of power possessed by the ferocious beasts in the countries which they inhabit. In those countries where lions exist, there are races of dogs capable of fighting them body to body. The animals that are formidable to man are more to be feared from their smallness than from their magnitude. There is not one, however, which does not turn to his advantage. Serpents, centipeds, scorpions, toads, inhabit scarcely any other than humid and unhealthy places, from which they keep us at a distance more by their hideous figures than by their poisons. The serpents that are really dangerous, have external signs that denote them from afar: such are the rattles of the American snake. Few persons perish from the wounds they inflict, unless they act in some way imprudently. Besides, our pigs and poultry eat them without any inconvenience. Ducks, in particular, devour them with avidity, as they likwise do most poisonous plants. Those of the kingdom of *Pontus* acquired so much me-

dical virtue by these aliments, which are common there, that *Mithridates* employed their blood in his famous counter-poisons.

There are, in truth,

Noxious Insects

which prey upon our fruits, our corn, and even our persons. But, if snails, may-bugs caterpillars, and locusts, ravage our plains, it is because we destroy the birds of our groves who would otherwise eat them; or, because, in importing trees from foreign countries into our own, such as the great chesnut of India, the ebony, &c. we bring with them the eggs of insects which these trees nourish, without importing, likewise, the birds of the same climate which destroy them. Every country has birds peculiar to itself, who preserve its vegetables. I have seen one at the Cape of Good Hope, called the gardeners' bird*, continually employed in taking worms and snails. I have likewise seen in the Isle of France, a species of starling, called martin, which comes from India, and which lives entirely on locusts, and insects that infest the cattle. If we could naturalise these birds in Europe, there is no discovery in science which would be equally useful to mankind.

* This seems to be a species of *shrike*, or *butcher-bird*, which is found in England, and other partts of Europe, at certain seasons.

But the birds of our own groves were quite sufficient to preserve our fields, if defended from the bird-catchers who take them by whole coveys, not always to confine them in cages, but frequently for food. A fancy was adopted some years ago, in Prussia, to exterminate sparrows as enemies to agriculture. Every peasant was subjected to an annual tax of twelve heads of these birds, of which they made salt-petre; for in that country nothing is wasted. At the end of the second or third year, they perceived that the harvests were devoured by insects, and they were obliged to invite the sparrows of neighboring countries to re-people the kingdom. In truth, these birds do eat a few grains of corn, when insects fail them; but insects, and among others the weevil, consume bushels and whole granaries: nevertheless, could we destroy the whole race of insects, it would be very imprudent to do so; for with these we should destroy the greater part of the birds of our meadows, who have no other food to give their little ones while in the nest. As to the animals who eat the corn in the granaries, and woollen cloths in the warehouse, such as rats, mice, weevils, or mites, and moths, I find that the former live principally upon filth, in the clearing away of which they do "the state some service;" and, besides, Nature has given the

Cat

to man, to preserve the interior of his dwelling.

Nature has endowed this animal not only with agility, patience, and wonderful sagacity, but also with a spirit of domesticity perfectly suitable to her office. She attaches herself only to the house, perhaps because she is acquainted with stations where she may watch with success: if the master removes she returns alone during the night. She differs essentially in this respect from the dog, who adheres only to the man himself. The cat has the affection of a courtesan, and the dog that of a lover: the first loves the property, the second the person. The weevil and the moth commit, it must be allowed, great ravages among our corn, and among our woolens. Some writers have said, that our yard fowls are sufficient to clear our

Granaries

of them: it is, possibly, true. We have, besides, the spider and the swallow who destroy these weevils when they change (like silk-worms), and becomes flies. For my part I shall consider, here, only their political utility. On looking at those large magazines wherein monopolizers amass the food and clothing of a whole province, ought we not to bless the hand that created the insect which forces them to sell the grain? If grain were as easily kept as gold and silver, and, if in keeping, it suffered no more alteration, it would presently be as scarce. Behold under how many

doors and locks those metals are deposited. The people would, at length, be deprived of all their subsistence, if it were as easily secured as these. The mite and the moth force the miser, in the first place, to employ many hands in stirring and sifting the corn; and, at last, they oblige him to part with it entirely. How many poor would go naked, if the moth did not devour the clothing of the rich! What is most wonderful, is, that, those articles which minister to luxury are not subject to destruction from insects, as are those which minister to the first wants of life. It is possible to preserve, in our climates, where they are luxuries, without any loss, coffee, silk, and cottons, even for ages: but, observe! in India, where these things are necessary to life, there, God has placed insects who quickly destroy them, particularly cotton.

Insects which attack the human body, in like manner, force the rich to employ those who have nothing, as domestics, to preserve cleanliness around them. The *Incas* of Peru even exacted this tribute from the poor, for in all countries insects attack man, though it has been said that they do not pass the line. Besides, these animals are more tiresome than dangerous: they draw off the bad blood. As they increase immoderately only in hot climates, they invite us to bathe, which practice is exceeding salutary, but neglect-

ed among us, because, being expensive, it is become a matter of luxury. After all, Nature has placed other insects near us, which destroy those that are injurious; these are spiders. I have heard of an old officer, who being much incommoded with bugs, at the hospital of invalids, suffered many spiders to live around his bed, and was thereby delivered from the bugs. This remedy, I am aware, will appear to many persons worse than the disease. But I believe it possible to find others more agreeable in perfumes and oily essences: at least I have remarked, that the odors of various aromatic plants drive away these disagreeable animals.

Though perfumes may be recommended, occasionally, as the means of quick destruction, the habitual use of them must be exceeding hurtful to ourselves. Familiarity with odors destroys the sensibility of the olfactory nerves; for it may be observed every day, that while a few grains of snuff will cause a fit of sneezing to persons unaccustomed to the use of it, great quantities are taken by others without producing any similar effect. Besides, strong perfumes cause the headach. But were the practice free from these inconveniences, still it ought not to be recommended to permanent use for the above purposes, because it releases us from that obligation to cleanliness which the existence of those insects very

fortunately imposes. It is the great law of Nature, that every particle of matter shall be incessantly rising into life. Were this to cease, corruption must ensue. If we indolently prevent the renovation of life by the use of strong (and, to these insects, poisonous) perfumes, while impurities accumulate around us, consequences much worse than their existence must follow. Nature has provided that every inch of creation shall produce living creatures; and it cannot be beneficial to us to counteract this decree by forming a poisonous atmosphere about our persons. Nature has planted aromatic plants in hot countries, and by the side of waters, as the meadow-sweet of our own brooks, to purify the air; but the constant or indiscriminate use of them in their full strength is injurious.

As to other

Calamities of Nature,

man experiences them only because he deviates from her laws. If storms sometimes destroy his orchards and his harvests, it is because he often places them in situations where Nature has not destined them to grow. Storms scarce ever injure any thing but the contrivances of man. They seldom hurt forests or natural meadows. Nature commonly elevates a number of trees together, man places them singly. Besides, storms have their use. Thunder refreshes the air. The hail,

which sometimes accompanies them, destroys a great number of insects; and storms are most frequent in the seasons when these hatch and multiply, that is, in the spring and summer. Without the hurricanes of the torrid zone the ants and locusts would render the islands situate between the tropics uninhabitable.

There is absolute necessity for

Volcanos,

whose fires purify the waters of the sea, as those of thunder purify the air.

Earthquakes

proceed from the same cause. Besides, Nature forewarns us of their effects, and of the places where they commonly happen. The inhabitants of Lisbon, well know that their city has been frequently damaged by these shocks, and that it is imprudent to build there with stone. There is nothing to be feared from them in houses of wood. Naples and Portici are not ignorant of the fate of Herculaneum. After all, these tremblings of the earth are not universal: they are local and periodical. Pliny has observed, that Gaul, or France, was not subject to them, but there are many other countries entirely free. They are seldom felt except in the neighborhood of volcanos, on the shores of the sea, or great lakes, and only at particular parts of those shores.

The epidemical

Maladies

of man, and the diseases of animals come from corrupted waters. Physicians, who have investigated their causes, attribute them sometimes to the corruption of the air, sometimes to the mildew of plants, and sometimes to fogs: but all these pretended *causes* are only *effects* of the corruption of the waters which infects the air with vegetables and animals. We may almost always attribute this to the imprudent labors of man. The most unwholesome regions of the earth, as far as I can recollect, are in Asia, on the borders of the Ganges, whence mortal fevers issue every year—that of 1771, destroyed more than a million of lives at Bengal. These come from the

Rice

plantations, which are *artificial morasses*, formed along the banks of the Ganges, for the sake of cultivating that grain, which thrives in marshy soils. After the grain is gathered, the roots and stalks of the plant which are left, rot and form infectious puddles all over the stubble, whence pestilential vapors arise. It is to prevent these inconveniences that the culture of rice has been forbidden in various parts of Europe, especially in Russia, in the environs of Orschakorf, where it was formerly produced.

In Africa, the air of the island of

Madagascar

is corrupted, and from the same cause, during six months of the year, and will ever present an invincible obstacle to any European establishment. All the French colonies which have settled there perished one after another from the corruption of the air; and I, myself, must with the rest have fallen a victim to it, had not Divine Providence, by means which I could not foresee, prevented my voyage, and the sojourn which I intended to make there.

It is from the ancient miry canals of

Egypt

that the leprosy and pestilence perpetually come forth. In Europe, the ancient

Salt-Marshes

of Bronage, whereto the sea no longer reaches, and where the waters of the rains remain, because they are confined by the dikes and ditches of the old salt pits, are become constant sources of disease among the cattle. Similar diseases, putrid and bilious fevers, and the land scurvy, annually issue from the canals of

Holland,

which putrify in summer to such a degree, that I have seen the canals of Amsterdam covered with dead fishes; and it was impossible to cross some of the streets without covering the nose with a

handkerchief. The people have, indeed, made a kind of current in these stagnant waters by means of wind-mills, which pump them up, and throw them over the dykes, in places where the canals are lower than the level of the sea; but these machines are not sufficiently numerous.

The bad air of

Rome

in summer, comes from its ancient acqueducts, the waters of which are spread among the ruins, or which inundate the plains, the levels of which have been interrupted by the works of the Romans. The purple fever, and other diseases, so common over all our plains, after the heats of summer, or in warm and humid springs, proceed, for the most part, from the puddles of the peasants, in which the leaves and refuse of plants putrify. Many of the distempers of our cities come from the lay-stalls which surround them, and from the cimeteries that are placed round our churches, and, in the very church itself.

I do not believe that there would have been a single unwholsome spot upon the earth if man had not put his hand to it. The malignity of the air of St. Domingo, of Martinico, of Porto-Bello, and many other places in America, have been spoken of as the natural effects of the climate: but these places have been inhabited by savages who, in every age, have employed themselves in

altering the courses of rivers and stopping the currents of brooks. These works are essential parts of their modes of fortification. They imitate the

Beavers

in the defence of their villages, by surrounding them with inundations. It should be observed, however, that Nature has placed beavers only in cold lattiudes; where, in imitation of herself, they form lakes which soften the air; and that she has placed running waters in warm latitudes, because lakes would soon change there, by evaporation, into putrid morasses. The lakes which Nature has made are among mountains, at the sources of rivers, and under cool atmospheres; I am still more induced to attribute to the savages the corruption of the air, so deadly in some of the Antilles, because those islands which were found uninhabited were perfectly healthy; as the isle of France, the islands Bourbon, St. Helena, &c.

It has always appeared to me unaccountable, that in

France,

where there are so many admirable establishments, we should have ministers for foreign affairs, of war, of the marine, finance, commerce, manufactures, the clergy, public buildings, horsemanship, *&c.* and that there should be none for agriculture. This proceeds, I believe, from contempt

for the peasantry. All men, however, are sureties for one another; and, independent of the stature and uniform configuration of the human race, I ask no other proof, that they come from one only origin. It is from the puddle of the poor man, whose little brook has been turned aside, that disease shall issue to lead the family of the neighboring villa to the grave. Egypt avenges herself, by the pestilence of her canals, of the oppression of the Turks, who prevent the inhabitants from keeping them in repair. America, fallen under the blows of Europeans, breathes from her bosom a thousand maladies fatal to Europe. She drags down with herself the Spaniard dying upon her ruins. Thus the Centaur left with Deïnira his robe, empoisoned with the blood of the Hydræ, as a present that should destroy his conqueror. Thus the evils with which mankind are loaded, pass from hovels to palaces; from the line to the poles; from ages past to ages to come; and their long consequences are awful voices which cry out in the ears of the powerful: "Learn to be just, and not to oppress the unhappy!"

Not only the elements, but reason itself corrupts in the haunts of wretchedness. From the retreats of misery issue forth thefts, murders, incendiaries, highway robberies, revolts, and a mul-

titude of physical evils, which, in all countries, are the consequences of tyranny.

When human policy fastens the chain round the ancle of the slave, Divine JUSTICE rivets the other end round the neck of the tyrant.

JUPITER has ordained, say the sacred books of Egypt, that, The evil which a man does to his fellow-creature, shall return with sevenfold vengeance upon himself; to the end that no man shall find his own happiness in the misery of another.

END OF THE SIXTH STUDY.

Seventh Study.

HARMONY OF NATURE.

WHEN Nature opposes contraries to each other, painful affections are excited in us; when she mingles them, we experience agreeable ones. Discord proceeds from the opposition of contraries, and harmony from their re-union.

Let us search in Nature for some proofs of the existence of this great law. Cold is opposed to heat, light to shade, water to earth; and the harmony of these contrary elements produces delightful effects; but if cold hastily follows heat, or heat, cold; the greater part of vegetables and animals, exposed to these sudden revolutions, run the risk of perishing. The light of the sun is agreeable; but if a black cloud intermingles with the brightness of his rays; or if brilliant fires burst from the depths of shade, such as those of lightning, our eyes suffer painful sensations. The terror of the thunder storm is increased, if to the loud peals, intervals of profound silence are added; and this terror is redoubled if the opposition of these fires and darknesses, of these tumults;

and peaceful intervals, occur during the gloom and silence of night.

Nature in a similar manner opposes on the

Sea,

the white foam of the waves to the black color of the rocks, to anounce, from afar, to seamen, the dangers of the shallows. Frequently, these rocks convey the idea of destruction by their very forms: such as those of ferocious beasts, of edifices in ruin, or the keels of vessels overset. She even causes hollow noises, resembling groans, to issue at long intervals from these objects. The ancients believed that they saw, in the Rock of Scyllya, a female of hideous form, whose girdle was surrounded by a pack of dogs incessantly barking. Our seamen have given to the breakers of the Bahama channel, so famous for ship-wreck, the name of the *martyrs*, because they exhibit through the spray of the billows which break upon them, the frightful spectacle of men impaled and exposed on wheels. They even think that they hear sighs and sobbings issue from these melancholy rocks.

Nature likewise employs these harsh oppositions, and these dismal signs, to express the characters of cruel and dangerous beasts of all kind.— The lion, wandering by night in the solitudes of Africa, announces his approach by distant roar-

ings, which strongly resemble the rolling of thunder. The vivid and momentary fires which flash from his eyes in the dark, give him in addition, the appearance of the meteor, lightning.—During winter, the howlings of the wolves, in the forests of the north, are like the groanings of the winds that agitate the trees: the cries of the birds of prey are shrill, sharp, and interrupted with deep tones. Nay, there are some which utter the accents of human sorrow. Such is the lom, a species of sea-fowl, who feeds on the dead bodies of animals on the shallows of Lapland: he cries like a man that is drowning.

But, when two contraries are blended together, of whatever kind they may be, we see pleasure, beauty, and harmony produced. I call the instant, and the point of their union—*harmonic expression*. This is the only principle which I have been able to perceive in Nature.

Of the colors employed by Nature,

J. J. Rousseau observed to me one day, that though the field of the celestial colors is blue, the tints of yellow which mingle with them, do not produce a green color, as happens in our material colors, when these two shades are blended But I replied, that I had frequently perceived. green in the heavens, not only between the tropics, but over the horizon of Paris. This color is in truth seldom seen by us, except on some fine

summer evening. In the clouds of the tropics, I have likewise seen all the colors perceptible on earth, particularly at sea, and during tempests. They are then of a copper color, others of the smoke of tobacco, brown, reddish, black, grey, chesnut, vivid, and the color of a burning oven. As to those which appear there in fine weather, they are so lively and so brilliant, that no place can ever be equally splendid, though enriched with all the gems of the Mogul. Sometimes the *trade-winds* of the north and south-west, which constantly blow there, card the clouds, as if they were skins of silk; then drive them away to the west, crossing and re-crossing them like the osiers of a basket. They throw upon the sides of this chequer work, the clouds which they have not yet employed, and these are not few in number; they roll them in enormous masses white as snow, draw them out in the form of cruppers, and pile them one upon another, like the cordeliers of Peru; moulding them into the shape of mountains, of caverns, and of rocks: afterward toward, evening, they calm a little, as if fearful of destroying their work. When the sun comes to set behind this magnificent net-work, you see a multitude of luminous rays passing through the meshes, which produce such an effect, that the two sides of the lozenge which they brighten, seems retired with threads of gold, and the two others,

which are in shadow, are tints of superb orange. Four or five streams of light rise from the

Declining sun

toward the middle of the heavens: clothe the indetermined summits of this celestial barrier, with fringes of gold, and cast upon the pyramids of of the ærial mountains the reflections of their fires; transmuting the dim vapors, into silver and vermilion. It is at this moment, that you see in the middle of their redoubled heights, a multitude of valleys extending into nothingness, distinguishing themselves, by shades of salmon, or rose, color. These celestial valleys present, in their various *contours*, inimitable tints of white, melting into other whites, or shades which pass over shades, without mingling themselves. Here, and there, you see rivers of light precipitating themselves from the cavernous sides of these mountains, in liquid gold and silver, upon rocks of coral. Here you see, dark rocks pierced through, and discovering through their apertures the pure blue of the firmament; there, long shores, and sands, of gold, stretching over the rich ground of heaven, poppy-colored, scarlet, and green as the emerald. The reverberation of these western colors, spread themselves over the sea, whose azure waves it glazes with saffron, and with purple. These amen, leaning over the gun-wale of the ship, admire in silence these

ærial landscapes. Sometimes, this sublime spectacle presents itself to them at the hour of prayer, and seems to invite them to lift their hearts, with their voices, towards heaven. It changes every moment: that which was luminous, is presently, only simply colored; and that which was colored, is now in shadow. The forms are as variable as the shades; they are by turns, islands, hamlets, hills planted with palm trees, grand bridges stretching over rivers, fields of gold, of amethysts, of rubies; or rather, they are nothing of all this: they are celestial forms and colors, which no pencil can imitate, nor no language describe. O, my countrymen, would you see these sights, would you travel to the tropics, to behold the beauties of Nature? Your labor is unnecessary; from your own windows, your own villages. your own gardens, you may frequently see evening skies as splendid, and, always, productions that deserve your admiration.

It is very remarkable, that travellers who have, at various seasons, climbed the highest mountains of the globe, between the tropics, and without the tropics, in the middle of continents, or of islands, have perceived in the clouds which were beneath them, only a grey and lead-like surface, without variation of color, resembling that of a lake. The sun, notwithstanding, illuminated those clouds with his whole light; and his rays

could there combine, without any obstruction, all the laws of reflection to which our physics have subjected them. It follows from this observation, that there is not a single shade of color uselessly employed in the whole universe; that the celestial decorations are made for the level of the earth; and, that their most magnificent point of view is from the habitation of man.

Of moral uses take the strife;
Leave me the elegance of life.
Whatever charms the ear or eye,
All beauty, and all harmony;
If sweet sensations these produce,
I know they have their moral use:
I know that NATURE'S charms can move
The springs that strike to VIRTUE'S love.

FABLES OF FLORA.

These admirable concerts of lights and forms, which manifest themselves in the lower region of the clouds, where they are least illumined by the sun, are produced by laws which are entirely unknown to me. But, let their variety be what it may, the whole are reducible to five colors; white; yellow, which seems to proceed from white; red, a deepened shade of yellow; blue, a very strong tint of red*; and black, the deepest tint of blue. This progression cannot be doubted, if the developement of light in the morning skies is observed; you see there these five colours, with their

* *Prussian blue* is made from the blood of an ox.

intermediate tints, producing one another very nearly in the following order: white, brimstone-yellow, lemon-yellow, yolk-of-egg-yellow, aurora-color, poppy-red, purple, violet, azure, indigo, and black: each of these colors seems to be only a strong tint of that which precede it, and a lighter tint of that which follows: thus the whole, together, seem only gradations of one progression, of which white is the first color, and black the last.

In this order, of which the two extremes are white and black, that is to say, light and darkness, producing in harmony so many different colors, you will remark that, the

Red,

color holds the middle place; and that it is the most beautiful in the opinion of every people.—The Russians, to say that a girl is *beautiful*, say that she is *red*. They call her *crastna devitsa;* for with them, *beautiful* and *red* are expressed by the same word. In Mexico and Peru, red was very highly esteemed. The most magnificent present which the emperor *Montezuma* could think of giving to *Cortez*, was a necklace of lobsters, which were of that rich color. The only request made to the Spaniards by the king of Sumatra, upon their first landing in his country, and presenting him with many specimens of the commerce and industry of Europe, was, for

a few corals and scarlet colored stuffs; and he promised them, in return, all the spicery, and other Indian merchandize, for which they might have occasion. The traffic with the Negroes, the Tartars, the Americans, and the East-Indians, is carried on very disadvantageously, unless scarlet stuffs are employed. The testimonies of travellers are unanimous as to the preference given by all nations to this color. I could collect an infinite number of proofs, were I not afraid of being tedious. I have indicated the universality of this taste only, to shew the falsehood of that philosophic axiom, which says, that taste is arbitrary: or, which is the same thing, that there is in Nature no laws for beauty; and that our taste is the consequence of prejudice. The direct contrary of this, is however, the truth: It is prejudice that corrupts our natural taste, which would otherwise be similar all over the earth. It is the result of prejudice, that the Turks prefer the green to every other color; because, according to the traditions of their divines, that color was the favorite of Mahomet; and because his descendants are the only persons among the Turks that have the privilege of wearing the *green* turban. But, from another prejudice, the Persians, their neighbors, despise *green*, because they reject this tradition, and refuse to acknowledge the affinity of the prophet; being sectarians, the fol-

lowers of Ali. Owing to another chimera, *yellow* appears, to the Chinese, the most distinguished of all colors, because it is that of their emblematic dragon. Yellow is the imperial color in China, as green is in Turkey. Notwithstanding this, and in support of our opinion, the Chinese represent their gods, and their heroes on the stage, with their faces stained with blood color. All these nations regard red, the political color excepted, as the most beautiful; which is sufficient to establish the universality of their preference.

But, without dwelling any longer on the variable testimonies of men, that of Nature will be sufficient. It is with red that Nature heightens the finets part of the most beautiful flowers. She has entirely covered the rose with it, which is their queen: she has given this color to the blood, which is the principal of animal life: she has invested a greater part of the birds of India with plumage of this color. There are few birds to whom she has not given some tint of this rich color. Some have their heads covered with it, like those which we call *cardinals*; others have breast-plates, collars, hoods, or shoulder-knots. There are some, the ground of whose plumage is entirely of a grey, or brown color, but which are glazed with red, as if they had been rolled in

carmine. Others are sprinkled with red, as if scarlet powder had been blown over them. With this, small white spots are intermingled, which produce a charming effect. A little bird of India, called *bengail*, is thus painted.

But nothing is more lovely than a

Turtle dove

in Africa, who bears on his pearly grey plumage, precisely over the place of his heart, a blood-red spot, made up of different shades, exactly resembling a wound. It seems as if this bird, who has been dedicated to love, wore the livery of his master, and had served as a mark for his arrows. What is still more wonderful, these rich colors generally disappear from the plumage of birds after the season of spring, as if they were robes of state which Nature lends them for that season.

END OF THE SEVENTH STUDY.

Eighth Study.

CONTRASTS IN THE WORKS OF NATURE.

CONTRASTS differ from *contraries* thus: white is the *contrary* of black; but it *contrasts* with blue, green, red, and various other colors.

Nature, to make her works distinguished, causes them to contrast with each other. This law is so much the less observed the more common it is. We tread the grandest and most admirable truths under foot, and pass them without any regard.

All naturalists consider the colors of bodies as simple accidents; and the greater part of them look upon their forms even as the effects of some attraction, chrystalization, *&c.* Books are every day written to extend, by analogies, the mechanical effects of those laws to the various productions of Nature; but if attraction, chrystalization, *&c.* have really so much power, why has not the sun, that universal agent, filled the heavens, the waters, the land, the forests, the fields, and all creatures, over whom he has so much influence, with the uniform and monoto-

nous effects of his light? All these objects ought to appear white, or yellow, like himself, and to be distinguished from each other only by their shadows. Landscapes ought to exhibit no other effect than those of a cameo or a print, where every thing is formed with different tones of the same color, as in an Indian-ink drawing. Latitudes, we are told, vary colors; but if latitudes have this power, why are not all the objects of the same climate, or, at least, of the same garden, of the same color? Why are not quadrupeds, who are born and who live in the meadows, why are these not green like the herbs that nourish them?

Nature is not contented with establishing particular harmonies in each species of creatures in order to characterise them, but, that they might not be confounded among themselves, she makes them contrast with one another. She has, in general, made herbs green to separate them from the color of the earth; afterward, she has given the color of the earth to animals who live on the herbage, to distinguish them in their turn from the turf on which they live. We may remark this general contrast among herbivorous quadrupeds, such as domestic animals, the yellow beasts of the forests; and in all granivorous birds, who live on the herbage, or on the foliage of the trees, as the yard-fowl, the partridge, the quail, the

lark, the sparrow, &c. who are of earthy colors, because they live among verdure. But those on the contrary who live on brown grounds, have brilliant colors, as the thrush, the tit-mouse, and the wood-pecker, who creep along the bark of the trees in search of insects, &c.

Nature every where opposes the color of the animal to that of the ground on which it lives. This admirable law is universal. I shall give a few examples here, to put the reader in the way of observing these ravishing harmonies of which he may find proofs in every climate. There is seen on the shores of India, a large and fine bird, white and fire colored, called the

Flamingo,

which appears at a distance like a flame. He commonly lives in swampy grounds and salt-marshes, amid the waters of which he builds his nest, raising a little hillock of mud. He makes a hole in the summit of this little turf: the hen lays two eggs, and hatches them with her feet sunk in the water, owing to the extreme length of her legs. When many of these birds are sitting on their nests in the middle of a swamp, they look like flames of fire ascending from the bosom of the waters. Other birds present other contrasts upon the shores. The

Pelican,

or, *Wide throat*, is a large bird, the colors of

which are white and brown; he has a captious bag under his beak, which is very long. He goes out every morning to fill his bag with fishes; and when he has completed his fishery, he perches upon some point of a rock on the level of the water, where he continues immoveable till evening, says *Father des Tertne*, as exceeding sorrowful, his head drooping with the weight of his long beak, and his eyes fixed on the agitated ocean, and as motionless as if himself were marble. On the brown strands of those seas may frequently be seen

Herons,

white as snow; and in the azure plains of heaven, the

Paillencu,

of a silver white, flying till he is lost to the sight: he is sometimes glazed with rose-color, with the two long feathers of his tail colored like fire, as those of the South Sea.

Frequently, the deeper the color of the ground, the brighter are the colors of the animal that lives upon it. We have not, perhaps, in Europe any insect of richer and gayer clothing than the beetle and fly, which are sometimes called *May* and *June Bugs*, and which live on dunghills. One is more bright than burnished gold and steel, the other of a fine purple blue, and to ren-

der the contrast more complete, he exhales a strong and agreeable odor of musk.

Nature, however, seems to deviate sometimes from this law, but then it is for other reasons of adaptation, according to which all her plans are adjusted. Thus, after having contrasted those with the ground on which they live, she has confounded those with it whose slowness or whose weakness gives them up to the discretion of their enemies. The

Snail,

who has no sight, is of the color of the bark of the trees which he eats, or of the wall on which he takes refuge.

Flat Fishes,

which swim badly, as the turbot, the flounder, the plaice, the burt, the soal, *&c.* which are formed like planks, because they are destined to live a sedentary life beneath the depth of the sea, are of the color of the sands where they find nourishment, being spotted, like the beach, with grey, yellow, black, red, and brown. It is true they are only thus speckled on one side; but so well do they know the use of their colors, that when they find themselves inclosed within the parks which are made on the shores, and when they feel the tide about to retire, they bury their fins in the sands, waiting for the next tide, and presenting to the eye of man only their deceitful side.

They resemble the ground on which they are concealed so completely, that it would be impossible for the fishermen to distinguish them without the help of sickles, with which they trace lines in every direction on the surface of the sand, to discover by the touch that which they could not see. I have witnessed this myself several times, more astonsihed at the dexterity of the fishes than at that of the fishermen. The

Thornback,

on the contrary, which is one of the flat fishes, and bad swimmers, but which is carnivorous, are marbled brown and white, to the end, that they may be perceived from far by other fishes; and that they may not themselves be devoured by their enemies, which are very alert, as sea-dogs, or by those of their own species, who are exceedingly voracious. Nature has covered them with thorny points, particularly on the hinder part of their body, as the tail, which is most exposed to attack when they are pursued. Thus, for the sake of the fishes which the thornkacks eat, their colors are made conspicuous, and because this circumstance exposes them in a particular manner to their own enemies they are provided with thorns.---Nature, you see, is just.

The more completely to defend

Harmless Animals,

Nature has given them, at once, contrasts with

the ground on which they live, and similarity or consonance to that with which they may easily resort; and, besides, she has given them sufficient understanding to enable them to employ these alternately, according to the good or bad fortune which attends them. We may remark these wonderful adaptations in the greater part of our small birds, whose flight is feeble, and of little continuance. The

Grey Lark

seeks her food among the herbs of the field. Is she frightened? she glides away between two clods of earth, where the similarity of her color renders her invisible. In this retreat she remains so tranquil that, she scarcely quits it when the foot of the pursuer is upon her. The partridge acts in the same manner. I have no doubt that these birds, who are destitute of other defence, understand these contrasts, and harmonies of color: for I have remarked it even in insects. In the month of March last, I observed on the brink of the river, at Gobelins, a

Butterfly,

of a brick colour, who reposed with his wings expanded on a tuft of grass. I approached him, and he flew away. He alighted at some little distance on the ground, which, at that place,

was of his own color. I came near to him again; he took a second flight, and alighted again on a similar strip of earth. In a word, I never could force him to settle on the grass, though I made frequent attempts, and though the spaces of earth that were between the plots of turf were narrow, and few in number. As to other animals, this astonishing instinct is very evident in the

Cameleon.

This species of lizard, which is extremely slow in its progress, is indemnified for this disadvantage by an incomprehensible faculty of assuming, at pleasure, the color of the ground by which he is surrounded. With this advantage he escapes from the sight of his enemies, who would soon overtake him by their speed. This faculty is in his will, for his skin is not a mirror. Though it partakes of the color of objects it does not reflect their forms. What is most remarkable in this animal, and well attested by naturalists, who have not, however, assigned any reason for it, is that, he takes all colors; as brown, grey, yellow, and, most frequently, green, which is his favorite color; but never red. Cameleons have been placed among scarlet stuffs during whole weeks without partaking of that color in the smallest degree. Nature seems to have refused this conspicuous color, because it would only

serve to make him perceptible at a greater distance; and besides, there is no earth, or vegetable, of that color, to which this animal naturally resorts. So that, in giving him the power of assuming the red color, Nature would have bestowed a useless present, and defeated her own purpose.

But, during the age of weakness and of inexperience, and of infancy, Nature makes the colors of all animals resemble that of the places which they inhabit, without leaving it to themselves to provide for moments of danger. Young *Pigeons* and most of the granivorous birds, are covered with greenish or yellow hairs, like the moss with which their nests are made. Caterpillars are blind, and their color is the same as that of the bark or the leaves on which they feed. The young fruit, even, which are not yet armed with thorns, as the horse-chesnut, enclosed in cases, with bitter pulps, or hard shells, to protect their seeds, are, during the time of their growth, green as the leaves which surround them. Some young fruits, it is true, as certain pears, are reddish or brown; but in this case, they are of the color of the bark of the tree whereon they grow. When these fruits have enclosed their seeds in kernels or in nuts, and out of danger, they change color. They become yellow,

blue, golden, red, black, and give the natural and beautiful contrasts to the plants which bear them. It is very remarkable that every fruit which has changed color has its seeds in a state of maturity.

Insects,

in the same manner, having shaken off their infantile dresses, and being given up to their own discretion, spread themselves over the world to multiply its harmonies by the variety of their colors and of their instincts. It is then that the colors of

Butterflies,

who, when caterpillars, were confounded with the verdure of the plants, come to oppose the hues and forms of their wings to those of the flowers: the red to the blue, the white to the red; *antennæ* to *stamina*, and *fringes* to *corollas*. One day I admired one of these insects, whose wings were azure, sprinkled with spots of aurora color, as he reposed himself on the bosom of a full blown rose. He seemed to dispute the praise of beauty with the rose. It would have been difficult to say to which the prize belonged: the butterfly or flower? But, on seeing the rose crowned with *lapis lazuli*, and the azure butterfly seated on a cup of carmine, it was easy to observe that, their charming contrast increased each other's beauty.

Nature has imparted none of these adaptations and agreeable contrasts to

Hurtful Animals,

nor to dangerous vegetables. Of whatever kind the carnivorous or venomous animals may be, they form, at all ages, and wherever they are, harsh and disgusting oppositions. The white bear of the north, prowling over the snow, gives warning of his approach by hollow groanings, by the blackness of his nose, and of his paws, and by his throat and eyes, of the color of blood. Those ferocious beasts who seek their prey in the midst of darkness, or in the depth of forests, announce their approach by roarings, by lamentable cries, by eyes flashing fire, and by fœtid odors. The

Crocodile,

in ambush upon the shores of the rivers of Asia, where he looks like the trunk of a tree thrown down, fills the air at a great distance with a strong odor of musk. The

Rattle-Snake

concealed in the marshes of America, sounds his rattles as he moves along the grass. Even those insects which make war upon others, are clad in dismal colors, harshly opposed, where black predominates, and clashes with white or yellow. The

Humble-Bee,

independent of his drowsy murmur, is known by

his black corselet and his large belly, bristled over with yellow. He appears among the flowers like an half extinguished coal. The carnivorous

Waſp

is yellow, and striped with black, like the tyger. But the

Honey Bee

is of the tint of the *stamina*, and the bottom of the *calices* of flowers, where she reaps her innocent harvests.

Dangerous Plants

present, like noxious animals, disagreeable contrasts in the livid colors of their flowers; where black, dark blue, and smoky violet, are in harsh opposition with softer shades; in nauseous and virulent smells; in prickly leaves of a black green, opposed by white on the underside: such is the *aconite*. I do not recollect any other plant so hideous as are those of that *family*; and, particularly, the *napel*, which is the most poisonous plant of our climates. I do not *know* that their fruits exhibit, from the first moment of their developement, harsh opposition which announce their evil character: if they do so, they have this farther resemblance to the young of ferocious beasts.

Animals which live in two different situations, have two contrasts in color. Thus, for example, the

King's-Fisher,

which skims along rivers, is at once musk-colored, and glazed with azure: so as to be detached from the brown shores by his azure color, and from the water by his musk color.

The Duck,

who paddles on the same banks, has a body tinted with ash-color, and his head and neck have the greeness of the emerald. Thus he is perfectly distinct, by his grey color, from the weeds and flags among which he paddles, and by his green head and neck, from the dark mud wherein he searches for food; and in which, by another astonishing contrast, he never soils his plumage. The same contrast of color is exhibited in the

Wood Pecker,

who lives upon the trunks of trees, along which he climbs to search for insects in their bark. This bird is both brown and green; so that, though he lives we may say, in the shade, he is always perceptible, nevertheless, upon the trunks of the trees: for he detaches himself from their dusky bark by that part of his plumage which is of a brilliant green, and from the verdure of their mosses, and of their lichens, by the ground color of his feathers, which is brown.

Nature opposes, then the color of every animal to that of the place in which he lives; and

what confirms the truth of this law is, that the greater part of birds which live on one ground only have but a single color, and that *one* strongly contrasted with the color of the ground. Thus, the birds who live on the azure ground of heaven, in the air, or on the waters in the middle of lakes, are mostly white, which of all colors forms the most striking contrast with blue, and it is consequently best adapted to render them perceptible at a distance. Such are, between the tropics, a bird of white sattin, which flies high in the air, the heron, the gull, the sea-mew, which skim along the surface of the azure deep, who swim in fleets upon the extensive lakes of the north.

There are others, likewise, that, to form contrasts with these, detach themselves from the heavens or the waters by black or brown colors: such are, for instance, the crow, which is perceptible at a great distance on the white ground of the clouds; many sea-fowls of a brown and blackish color, as the

Frigat

of the tropics, which plays through the air amid storm and tempest; the mower, or sea-cutter, a marine bird, which grazes with his dark-colored wings, the white surface of the foamy billows of the ocean.

We may infer, from these observations, that, when an animal has one only color, he lives only

in one situation; and, when he has in himself a contrast of two opposite colors, that he lives upon two grounds, the colors of which may be ascertained by the colors of the animal's fur, or plumage. In the mean time we must not apply this law too generally; but allow for those exceptions which wise Nature has established for the preservation of particular animals; such as clothing them in white, for the most part, in the north, in winter, and upon the tops of mountains. She does this to preserve them from an excess of cold: and their white clothing answers this purpose by reflecting the greatest quantity of heat.* On the other hand, she embrowns them in the south, in ardent summer, and on burning sand, to shelter them from too great heat, by means of absorbing colors. What evidently proves that these great effects of harmony are not mechanical results from the influences of the material objects which surround these

* Snows and frosts are for this reason white. Nature has provided to counteract the extremes of heat and cold. In hot countries every thing has a tendency to coolness, and in cold climates every thing contributes to warmth. For these purposes snows descend, and the leaves fall from the trees, which would otherwise obstruct the little sun-shine that is given. In direct opposition to these laws of Nature, for *Nature* is thought an ignorant savage, unblest with civilization, the general practice of the commonalty, at least, is, to wear light colored clothing in summer and dark in winter.

animals, or the action of the rays of the sun, according to our pretended philosophy, is that, among the almost infinite number of birds who pass their time aloft in the air, or, upon the surface of the waters, which are azure, there is not one whose color is blue; and, on the other hand, many of those birds who live between the tropics, on the ridges of black rocks, or in the shade of dark forests, are of the azure color: such are the pullet of Batavia, which is intirely blue; the Dutch pigeon of the Isle of France, &c.

We may draw from these observations another consequence equally important: it is that, all these harmonies are adapted to man. A blue bird upon the ground of heaven, or, on the surface of the waters, would escape our sight. Nature has, besides, reserved the richest and most agreeable colors for those birds which live in our neighborhood. This is so true that, though the sun acts between the tropics with the whole force of his rays on the birds of the wide ocean, there is not one whose plumage is adorned with fine colors; while those birds who live on the shores of the sea, and on rivers, are, in many instances, magnificent. The *flamingo*, a large bird, that lives in the marshes of the southern ocean, has a white plumage, dipped in carmine. The

Toucan,

on the same shores, has an enormous bill of the

liveliest red, and when he retires from the humid sands, wherein, with help of his large bill, he finds subsistence, you might suppose that he had fished out a branch of coral. There is another species of *toucan* whose beak is white and black, polished as if it were ebony and ivory. The pintada, with speckled plumage, the peacock, the duck, the kings-fisher, and a multitude of other river birds, embellish, by the enamel of their colors, the banks of the rivers of Asia, and of Africa. But no plumage, comparable with these, is to be seen in the open sea, however exposed to the influence of the sun.

It is from a similar adaptation to man that, Nature has bestowed sweet notes and melodious voices upon the little birds who are near our habitations. Sea-fowls, and birds of prey, have loud screaming voices, that they may be heard by one another at great distances, amid contrary winds, and in wide expanded places, where there is no inclosure to stop and return the sound.

Every department of Nature exhibits the same attention to man as in those parts which are particularly presented to his eye. The fishes which live on flesh, as all the cartilaginous do, such as the seal, the sea-dog, the shark, the slipper, the thorn-back, the polypus, and many others, have disgusting forms and colors. Fishes which live in the open sea, have marbled colors, black,

white, and brown, which distinguish them in the bosom of the azure waves: such as the whale, the blower, the porpoise, and others. But it is among those that live on the brown shores, and particularly in the number of such as are denominated *saxatile*, because they live among rocks, that we find those, the lustre of whose skin and scales surpasses the richest painting, especially while alive. It is thus that legions of mackarel and herrings give to the northern strands of Europe the radiance of silver.

It is around the black rocks which border the seas of the tropics, that the fish known by the name of

Captain

is caught. Though his colors differ in different latitudes, it will be sufficient, in order to give an idea of his beauty, to cite the description which has been given of him by *Francis Cauche*, in his account of Madagascar. He says that this fish, which loves the rocks, is striped in the form of lozenges; that his scales are of a pale gold color, and that his back is colored and glazed over with lake, approaching, in several places, to vermilion. His dorsal fin and tail are waved with azure, inclining to green, toward the extremities.

It is likewise at the feet of the same rocks that the magnificent fish, called the

Sardin

is found. It is adorned with scales of a gold and silver hue, crossed from head to tail by black lines which admirably heightens the lustre. This fish is found on the coast of Brasil, where there are, also, a number of species of the

Moon-Fish.

For my own part, I have amused myself, on the rocks of the Island of Ascension, in observing, for hours together, the moon-fish sporting amid the tumultuous waves which are incessantly breaking upon them. These fishes, of which there are various species, have the round, and sometimes sloping, form of the star of night, whose name they bear. Like her, they resemble burnished silver. They seem made to deceive the fishermen in every particular; for their bellies are streaked with black stripes, in lozenges, which makes them appear as if they were caught in a net; every instant they are upon the point of being cast ashore by the motion of the waves wherein they play; they have so small a mouth that they frequently eat the bait without biting the hook; and their skin without scales, like that of the seal, is so hard, that the three-pronged harpoon often strikes in vain, though keenly whetted. *Francis Cauche*, says that it requires considerable exertion in order to cut their skin with the sharpest knife.*

* This excessive hardness of the skin of these fishes seems a provision against the blows which they must frequently receive while tossed about by the waves in shallows.

When you see a brilliant fish, you may assure yourself that he lives near the shore; and, on the contrary, if his color is dull, that he inhabits the wide ocean.

Is it not strange that, when so many plants and so many animals present us with such fine conformations, and adaptations to our wants, so admirable, and proofs so evident of divine benevolence, there should be persons who collect mishapen creatures, pigs with snouts lengthened in probosces, as if our yards were filled with little elephants; and who place them with much parade in cabinets which are said to be intended to assist the Study of Nature? Those who treasure up these things, and thence draw their inferences and their doubts concerning the wisdom of the Creator, have they not a vile taste, and a certain malicious tincture in their minds? And do they not act like one who should rake among the refuse of a pottery, and pick up figures and vessels accidentally spoiled, and shew them as proofs of the ignorance of the artist? The ancients burned monsters; the moderns preserve them! These resemble wicked children, who delight to find their mother in fault, to supply themselves with an excuse for doing wrong. Ah! if the earth were indeed given up to disorder, and if, though not till after an infinity of combinations, there should appear, at last, amid the monsters that covered every side,

but one well-proportioned body, adapted to the necessities of man; what joy would it not give to susceptible and unhappy beings, to discover that there is somewhere an Intelligence that is attentive to their condition!

END OF THE EIGHTH STUDY.

Ninth Study.

CONCERTS IN NATURE.

CONCERT is an order composed of *several harmonies of various kinds.* It differs from simple order, in that this last is often only a *series of harmonies of one kind.* Every individual work of Nature presents, in different kinds, harmonies, consonances, contrasts, and forms a real concert. We may remark, on the subject of these harmonies, and of these contrasts, that those vegetables whose flowers are least striking, are inhabited by animals of brilliant colors, and that those vegetables whose flowers have most lustre and color, serve as an asylum for dusky animals. This is very observable in the countries between the tropics, where few of the trees or plants have apparent flowers, and where birds, insects, and even monkeys of so lively color are found. It is in the plains of India that the peacock displays his magnificent plumage on the shrubbery of which the verdure is destroyed by the sun; it is in the same climates that the arras, the lauris, and parrots, enamelled with a thousand colors, perch on

the grey branches of the palm-trees; and that clouds of little perroquets, green as emeralds, feed on fields yellowed by the long heats of summer.

In our temperate regions, most of the birds are of dull colors, because the greater part of our plants have flowers of lively colors. It is very remarkable that those of our birds, and of our insects who have gay colors, live, in ordinary, on vegetables without apparent flowers. Thus the heath-cock shines on the grey verdure of the pines, the apples of which serve him for food. The goldfinch builds his nest on the rugged fullers thistle. The gayest of our caterpillars, which is marbled with scarlet, is found upon a species of tithymal, which grows, in general, in sandy places and in the quarries of the forest of Fontainebleau. On the contrary, our birds of dusky tints inhabit shrubs with gay flowers. The black-headed bull-finch builds his nest in the white-thorn, and that lovely bird makes very agreeable consonance and contrast with this thorny shrub, by the redness of his breast and the sweetness of his song. The nightingale, with her brown plumage, loves to nest in the rose-bush, according to the traditions of oriental poets, who made many pretty fables on the loves of this melancholy bird for the rose.

We always find, in the cells of the *Mole* fragments of the bulbous root of the *colchica*, close by the nest of her young: Now, if you examine all the plants which usually grow in our meadows, you will find none which forms more harmonies with the black color of the mole, than the white flowers, purple and lilachy, of the *colchica*. This plant is, also, friendly to the mole, by affording a powerful means of defence against his natural enemy, the dog, who is always hunting after him in the meadows: for if he eats of the *colchica* he is poisoned. It is for this that the *colchica* is called *dog-bane*. The mole finds food, then, and protection against his enemies in the *colchica*, as the bull-finch does in the white-thorn. These harmonies are not only agreeable objects of speculation; we may make them very useful: It follows, for example, from what we have said, that, to invite the bull-finch to a shrubbery, you should plant the white-thorn; and that to drive away the moles from a meadow, you should destroy the bulbs of the *colchica*.

If you add to each plant its elementary harmonies, such as, the season in which it appears, the site on which it grows, the effects of the dews, and the reflexes of the light upon its leaves, the motion to which it is liable from the action of the winds, the contrasts and consonances with

other plants, and with the quadrupeds, the birds, and the insects which belong to them, you will see a delightful concert formed around, the accords of which are still unknown. This is the track, however, that we must follow, if we would have a glimpse of the immense and wonderful edifice of Nature. I exhort naturalists, lovers of gardens, painters and poets, thus to study, and to take frequent draughts at this everlasting source of taste and pleasure. They will see new worlds presenting themselves. Without leaving their own horizon, they will make discoveries more curious than many of those which are contained in our books, and in our cabinets, where the productions of the universe are presented piece-meal, and placed by themselves in the little drawers and boxes of our mechanical systematisers.

I do not know, now, what name I ought to give to the adaptations which these particular concerts have with man. It is certain that there is no work of Nature but which strengthens its natural character by connecting itself with the habitation of man, and which does not add, in its turn, to that habitation, some expression of grandeur, gaiety, terror, or majesty. There is no meadow which is not made more chearful by a dance of shepherdesses, nor no tempest which is not rendered more terrible by the wreck of a vessel. Nature raises the physical character of her works

into a sublime moral character, by uniting them round mankind.

When Nature means to express the maleficent character of a venomous plant, she assembles clashing oppositions of forms and colors, which are the signs of maleficence; such as retreating and bristly forms, livid colors, dark greens, with white and black spots, virulent odors. But, when she means to characterise whole districts which are unhealthy, she assembles a multitude of similar dissonances. The air is filled with thick fogs, the turbid waters exhale nauseous smells; no vegetable thrives on the putrid earth, except such as are disagreeable: the dragunculus, for instance, the flower of which exhibits the form, the color, and the smell of an ulcer. If any trees arise in its cloudy atmosphere, it is the yew, whose red and smoaky trunk, seems to have been in fire, and whose black foliage is the abode of the owl only. If some other animals are to be seen seeking refuge under its shades, they are the centipeds, of the color of blood, or toads, crawling on the humid and rotten ground. It is by these signs, or others equivalent, that Nature frightens man away from situations that are not fit for him.

Would she give him warnings at sea of a *Tempest?*

As she has opposed, in ferocious beasts, the glare of the eyes to the thickness of the eye-brows,

the stripes and marblings with which they are distinguished, to the yellow color of their skins; the silence of their motions to the roarings of their voices; so she collects in the sky, and on the waters, a multitude of clashing oppositions, which announce, in concert, the destruction. Dark clouds cross the air in the horrible forms of dragons. Here and there you see the paly fires of lightning bursting out. The noise of the thunder, which is carried in the clouds, resembles, as it were, the roarings of the celestial lion: the day-star, which can scarcely be seen through their rainy and numerous veils, sends forth long rays of a sickly light. The leaden surface of the sea, scoops and swells into large white foams. Dismal groans seem to arise from the waves. The black shallows whiten at a distance, and utter frightful noises, interrupted by as horrid silences. The sea, which covers, and now discovers, them, shews to the light of day their cavernous foundations. The lom of Norway perches upon a point of the rocks, and you hear his alarming cries, and fancy that a man is drowning. The sea-ospray rases aloft into the air, and, fearful of abandoning herself to the impetuosity of the winds, she struggles, uttering plaintive cries, against the blast that bends her wings. The black *procellaria* flies along, grazing the foam of the billows, and seeking in their transient valleys, shelter from the fury of the

wind. If this small and feeble bird perceives a ship amid the ocean, she comes for refuge along its side, and, as a recompence for the asylum which she asks, she announces the tempest before it arrives.

Nature always apportions the signs of destruction to the greatness of the danger. Thus, for example, the signs of a tempest off the coast of the Cape of Good Hope, surpass, in many respects, those of our coasts. The celebrated *Vernet*, who has given us so many terrifying pictures of the sea, has not painted all its horrors. Every storm has its particular character in every latitude: those of the tempests of the Cape of Good Hope are not like those of Cape Horn, nor of the Baltic like the Mediterranean, nor the Bank of Newfoundland like the coast of Africa. They vary also with the seasons, and even with the hours of the day. Those of summer are not the same as those of winter; and the sea agitated, shining at noon-day, under the beams of the sun, is a different spectacle from that of the same sea illuminated in the middle of the night by a single flash of lightning. But in all you may observe the clashing oppositions which I have mentioned.

I have remarked one particular respecting the tempests of the Cape of Good Hope, which admirably supports all that I have heretofore advanced upon the principles of discord and harmony,

and which may give birth to deep reflection in some one that is possessed of more information than myself. It is that Nature often accompanies the signs of violent storms, that overturn the ocean, with agreeable expressions of harmony, which redoubles the horror. Thus, for example, in the two tempests which I have experienced, I have not seen the heavens obscured by dark clouds, nor the clouds broken by momentary flashes of lightning, nor a sea dirty and lead-colored, as in the tempests of our climates. The heavens, on the contrary, were of a fine blue, and the sea azure-colored; there were no other clouds in the air than little red vapors, dark in their centre, and illumined at their edges with the yellow brilliance of polished copper. They came from a single point of the horizon, and traversed the air with the rapidity of a bird. When the lightning broke our main-mast in the middle of the night, it did not make any other noise than that of a cannon that seemed to be discharged close to our ship. Two other explosions which had preceded this, had made similar noises. This tempest happened in the month of June, that is to say, in the winter of the Cape of Good Hope. I experienced another in re-passing it in January, that is, in the middle of its summer. The color of the sky was blue, as in the former instance; and I saw only five or fix clouds on the horizon;

but each was black, white, cavernous, and of enormous magnitude. They resembled a part of the Alps in the air. This tempest was much less violent than the other with its little red vapors. In both the sea was azure, like the sky; and on the vast billows, fringed with foam, tricolored rainbows were formed. These tempests, in clear days, are more frightful than I can express them. The soul is perplexed to see the signs of fine weather mingled with those of the tempest; the azure in the heavens, and rainbow on the waves. The principles of harmony seem destroyed; Nature seems to clothe herself with treachery, and to cover her fury with the appearance of benevolence.

Nature employs these horrid contrasts, to keep men away from perilous places. In all the rest of her works she assembles only harmonic mediums. I shall not engage in the examination of their various concerts, which is a rich inexhaustible topic. It will satisfy my ignorance if I indicate some of their principles. I shall attempt, however, to trace a flight sketch of the harmonies of our

Harvests,

which, being the works of our agriculture, appear to be given up to that monotony which characterises the operations of man.

It is remarkable that our corn exhibits, during its growth, that delightful shade of the green which results from the mixture of two opposite

primordial colors; these are yellow and blue.—This harmonic color, is in its turn, decomposed by another metamorphosis, when toward ripening time, three primordial colors appear. These are: the yellow ears, the red of the poppies, and the azure of the corn-bottles. These two flowers are always found among the corn of Europe, with whatever care the labourer may dress and winnow the grain. Mingling together, they form a very rich purple, which is seen to great advantage on the yellow harvest. If we examine these flowers separately, we shall find in them many particular contrasts with each other; for the corn bottle has jagged leaves, and those of the poppy are large and divided: the corn-bottle has corrilas of leaves spread out in rays, and of a delicate blue; and the poppy has large leaves of a deep red. The corn-bottle sends out its branches in a divergent direction, and the poppy carries them upright. Besides these, we find among the corn, another which rises to the height of the ears, with beautiful purple, trumpet-formed flowers, and the flesh-colored convolvolus that climbs up their stalks, and entwines them with verdure like *thyrses*. There are still many other plants which commonly mingle themselves, and form many agreeable contrasts. The greater part exhale sweet odors: and when the winds agitate them,

you imagine, in their undulations, a sea of verdure and of flowers. Add to this, a certain rustling of the ears of corn that is extremely agreeable, and that, by its soft murmurs, inclines you to sleep.

These delightful forests are not without inhabitants. Beneath their shades you see the green and golden beetle, and the monoceros of the color of burnt coffee. There are, besides many charming contrasts among the flies and butterflies that are attracted by the flowers of the corn-field, and in the manners of the birds that inhabit it. The swallow, with untired wings, grazes incessantly along its undulating surface, as if it were a lake, while the sedentary lark rises from beneath, singing within sight of its nest. The domestic partridge, and the traveller quail, there equally nourish their young. Frequently a hare places her lair in their neighborhood, and peacefully partakes their food.

These animals are usefully related to man, as food and as clothing. It is very remarkable that they are found in every corn-field in Europe, and that their species are varied according to the different situations which men inhabit: for the different species of quails, of partridges, swallows, and hares, for plains, mountains, meadows, forests and rocks.

As to the corn, it has innumerable connexions with man, and with domestic animals. It is neither too high nor too low, but admirably adapted to their height. It is easily reached and gathered. It gives grain to his fowls, straw to his swine, forage and litter to his horse and to his ox. Every plant that grows among it, has virtues particularly adapted to the maladies to which the peasantry are subject. The wild poppy cures the pleurisy, and it induces sleep; it stops bleeding: The corn-bottle is diuretic, a styptic, a healer of wounds, and a cordial; it cures the bites and stings of venomous animals, and the inflammation of the eyes. Thus a laborer finds his whole *materia medica* in his corn-field.

The culture of corn presents other agreeable concerts with human life. Its shadow shews to the husbandman the hour of the day, and its growth the progress of the seasons: he reckons his fugitive years only by innocent harvests: his labours are always exceeded by the blessings of Nature. As soon as the sun is in *virgo*, he assembles his relations, he invites his neighbors; and at day-break he accompanies these, with his sickle in his hand, into the ripened field. His heart palpitates with joy, as the sheaves accumulate; and his children dance round him, crowned with corn-bottles, and with poppies: their plays bring back to his mind those of his early years,

and the remembrance of his beloved parents, whom he hopes to see again in a more happy world. He doubts not that he has a God, under whose eye are his harvests: and at the recollection of the sweet epochs which they bring to his mind, he thanks him for having bound together the fleeting society of man, by an eternal chain of benefits.

Flowery meadows, majestic and murmuring forests, mossy fountains, wild rocks, abodes of the solitary dove, lovely solitudes, that delight us by ineffible concerts; happy is he that may lift the veil that hides your sacred charms! but, still more happy he that may enjoy your peaceful blessings!

END OF THE NINTH STUDY.

Tenth Study.

OF THE SENTIMENTS OF THE DIVINITY, AND OF OUR MISÉRY.

EVERY nation has the sentiment of the existence of God: not that they raise themselves to him as Newtons, or as Socrates, by the universal harmony of his works, but rather by fixing their attention on those blessings which interest them most. The Indian of Peru worships the sun; the Indian of Bengal, the Ganges, which fertilizes his fields; the black Jolof, the ocean, which cools his shores; the Samoïede of the north, the rein-deer that feeds him; the wandering Iroquois prays to the spirits of the lakes and of the forests for successful fisheries and chaces. Many nations adore their kings.

While this sentiment constantly reminds men of their excellence, there is another which is incessantly making them feel their misery. The conflicts of these two sentiments produce the varieties and contradictions of human life.

It is our sentiment of misery, that leads us with much avidity to whatever offers an idea of asylum and protection, of ease and of accommodation.

See, now, why it is that the greater part of men fix their ambition upon tranquil retreats, abundance, and all the treasures which liberal Nature presents upon the earth, to minister to our wants. It is this sentiment which renders the peaceful citizen so anxious for accounts of court intrigues, narratives of battles, and descriptions of tempests, because the report of dangers at a distance increase the pleasures of internal security. This sentiment often mingles itself with the moral affections. It inclines us to seek support in friendship, and encouragement in praises. It is this sentiment which makes us attentive to the promises of the ambitious man, when we follow him eagerly and like slaves, implicitly, seduced by the idea of protection with which he baits us. Thus the sentiments of our misery is one of the most powerful bonds of political society, though it attaches itself to the earth.

The sentiment of the DIVINITY pushes us forward in another direction. It was this which conducted love to the altar, and inspired its first vows. It renders love sublime, and friendship generous. It succors the unhappy with one hand, and opposes the other to tyrants. It is the moving principle of generosity, and of every active virtue. Satisfied with serving mankind, it seeks not their applause. When it shews itself in the arts, or in the sciences, it is the nameless charm which delights us, and when it is absent, insipidity diffu-

ses itself around them. It is this sentiment which renders those men of genius immortal, who have discovered in Nature new proofs of wisdom.

When these two sentiments cross each other, that is to say, when we attach the divine instinct to perishable objects, and the sentiment of our misery to things divine, our life becomes agitated by contradictory passions. Behold the cause of so many hopes, and frivolous fears, which torment mankind. "My fortune is made," says one, "I have a competence *for ever*:" and the next day he dies. "How miserable am I!" says another, "I am undone *for ever*;" and presently death releases him from all his sorrows. "We are bound down to life by the merest trifles," said *Michael Montaigne*, "by a glass." Yes, because on that glass is impressed the sentiment of infinity. If life and death often appear insupportable to men, it is because they wrongly associate the idea of their *end*, with that of their *death*, and the idea of *immortality* with that of their *life*. Mortals, if you would live happily, and die with tranquility, do not oppose your laws to those of Nature: consider that in death, all our animal cares come to an end, and the wants of the body, diseases, persecutions, calamities, bondages of all sorts, the rude conflicts of the passions with thyself, and with others: consider that at death all the pleasures of a moral being begin;

the recompense of virtue, and of the slightest acts of justice and humanity; acts despised or disdained by the world, but which have, in some degree, placed you near, even while on the earth, to a Being righteous and eternal.

When these two instincts unite in the same place, they give us the greatest pleasures of which we are susceptible; for then our *two natures*, if I may use the expression, are gratified at once. We are going to present a slight assemblage of their harmonies.

I suppose you, reader, wearied with the miseries of society, seeking toward the coast of Africa, some happy spot unknown to Europeans. Your vessel, sailing on the Mediterranean, is cast, late in the evening upon a coast, where it is shipwrecked. Heaven so willing, you gain the land. By the glare of the lightning you discern a grotto at the end of a little valley. Sheltered in this asylum, you listen all night to the pealing thunder, and to the rain which falls in torrents. At dawn you see behind you a girdle of lofty rocks, as steep as walls. From their bases arise, here and there, clumps of fig-trees, covered with white and purple fruit, and tufts of *carobs*, loaded with brown pods: the summits of the rocks are crowned with pines, wild olives and cypresses, half bent by the violence of the winds. The echos of the rocks repeat in the air the confused murmurs of

the tempest, and the hoarse noises of the raging ocean, which you perceive at a distance. But the little valley wherein you are is the abode of peace and rest. In its mossy sides the sea-lark builds her nest, and on the solitary shores the mavis waits the ending of the storm.

Now the first fires of Aurora beam over the flowery *stachys*, and the violet beds of thyme, which cover the hills. The light enables you to perceive upon the summit of a neighboring eminence, a cottage overshadowed with trees. The door opens, and from it comes a shepherd, his wife, and his daughter, who take the path toward the grotto, carrying vases, and baskets upon their heads. It is the sight of your misfortune that has drawn these good people near you. They bring you fire, fruits, bread, wine and clothing. They are eager to pay you the duties of hospitality. The wants of the body being satisfied, you feel those of the soul: you cast your eyes toward the sea, and you endeavor within yourself to discover upon what part of the world you are thrown: but the shepherd releases you from your perplexity, by saying: "That island which you see far northward is Mycone. You see Delos a little to the left, and Paros is before you. This, on which we stand, is Naxos: you are in that part of the island where

Ariadne

was formerly abandoned by Theseus. It was on that long bank of white sand, which advances below us into the sea, that she passed the days, looking at that part of the horizon wherein the vessel of her faithless lover disappeared from her sight; and it was in the grotto where you now are, that she retired, during the nights, to weep for his departure. To the right, between two little hills, stood a flourishing city, called Naxos. The women who inhabited it, touched by the misfortunes of the daughter of Minos, came to find her, and to comfort her. At first they endeavored to amuse her by conversation; but nothing could please her but the name and remembrance of Theseus.—Then the ladies counterfeited letters from that hero full of affection, and addressed them to Ariadne. They ran to deliver them to her, saying: "Be comforted lovely Ariadne, Theseus will soon return; Theseus always thinks of you." Ariadne, transported, read the letters, and, with a trembling hand, hastened to answer them. The Naxians carried her replies, and promised to send them speedily to Theseus. In this manner they deceived away her grief: but when they perceived that the sight of the sea plunged her into deep melancholy, they drew her into those extensive groves which you see below in the plain. There they invented every species of merriment to relieve

her depression. Sometimes they formed choral dances around her, and represented, by joining their hands, the windings of the labyrinth of Crete, from which the happy Theseus escaped by her assistance: sometimes they pretended to kill the terrible monster, Minotaur. Ariadne's heart expanded with joy at beholding spectacles which represented the power of her father, the glory of Theseus, and the triumph of her own charms, which had repaired the destiny of Athens: but when the winds, notwithstanding the sounds of the tabor and the pipes, brought to her ears the distant noise of the billows which broke upon the shore, wherefrom she saw the cruel Theseus depart, she turned toward the sea and burst into tears. They endeavored, therefore, to remove Ariadne from these places, and these sounds.—They persuaded her to come into their city, where they provided grand feasts, in magnificent halls, supported by pillars of granite. There no man was permitted to enter, no noise from without could be heard. They had covered the pavement, the walls, the doors and the windows with tapestry that represented meadows, vineyards, and agreeable solitudes. The place was illuminated with a thousand lamps and torches. They made Ariadne sit down in the midst of them on cushions; they placed a crown of ivy, with its black berries, upon her flaxen hair, and round her pale fore-

head; then they set urns of alabaster at her feet that were full of excellent wines; they filled golden cups, and presented them to her, saying—"Drink, lovely daughter of Minos, this island produces the finest gifts of Bacchus. Drink—wine dissipates sorrow!" Ariadne, smiling, yielded to their intreaties. In a little time the roses of health re-appeared upon her face, and speedily it was rumored in Naxos that Bacchus had come to the succor of the lover of Theseus. The inhabitants, transported with joy, erected a temple to that god, some columns, and the frontispiece of which, you see upon that rock, in the midst of the waves. But Ariadne was at length consumed by her regrets, and even by her hopes. See, at the extremity of the valley, upon a little hillock, covered with sea-wormwood, is her tomb, and her statue still looking toward the sea. That monument, like every other in this country, is mutilated by time, and still more by barbarians; but the memory of suffering virtue is not at the disposal of tyrants. The tomb of Ariadne is with the Turks, and her crown is among the stars.

"As for us, escaped from the eye of the powers of the world, through our obscurity itself, we have, by the goodness of heaven, found liberty at a distance from the great, and happiness in the deserts. Stranger, if the gifts of Nature

still touch you, you may freely partake them with us."

During this recital, tears of compassion flow from the eyes of his wife, and of his young daughter, who sighs at the remembrance of Ariadne: and I doubt whether an atheist himself, who discovers in Nature the laws of matter and motion only, could be insensible to the feeling of the harmonies present, and to the recollections of the past.

Voluptuous men! It is only Greece, you say, that offers scenes and points of view so touching as this! Hence Ariadne is in every garden, Ariadne is in every collection of pictures. From the window of your villa cast an eye over your estates; their hills present more beautiful horizons than those of desolate Greece. Your apartment is more commodious than a grotto, and your sophas are softer than the turf. The undulation and the murmurs of your corn and full-grown hay are more agreeable than those of the waves of the Mediterranean. Your money and your gardens produce a greater variety of wines and fruits than are to be found in all the Archipelago. Would you mingle the delights of gods with these your pleasures? behold, upon yonder hill, that little village-church, surrounded by ancient beech-trees. Among the girls who assemble under its rustic porch, no doubt, there is some Ariadne. She is

not marble ; but she is alive : she is not a Greek, she is a country-woman ; she is not consoled, but despised by her companions, Go into her poor dwelling, sooth her misery ! Do good in this life, that passes away as a torrent! Do good, not through ostentation, and by the hands of strangers ; but for Heaven's sake, and in your own person. The fruit of virtue loses its bloom when gathered by the hand of another. Ah ! if you, yourself, solace her afflictions, if, by your compassion you lift her up to the respect of society, you will see, at the reception of your kindness, her face covered with blushes, her eyes filled with tears, her lips moving convulsively, without speaking, and her heart, long time oppressed with shame, recovering itself at the sight of its benefactor, as with an inward feeling of divinity. You will then perceive in the human form some traits unknown to the chissel of the Greeks, or, to the pencil of the Vandycks. The happiness of an unfortunate will cost you less than the statue of Ariadne ; and, instead of illustrating the name of an artist during a few years, it will immortalise your own. Long after you are no more, she that you relieved will say to her companions and to her children ; " He was a " god that lifted me up from my misery !"

END OF THE TENTH STUDY.

THE

GAULS.

Section I.

TIRTEUS.

A LITTLE before the autumnal Equinox, *Tirteus*, a shepherd of Arcadia, was feeding his flock on one of the heights of Mount Lyceum, which projects along the gulph of Messenia. He was seated under the shade of some pine trees, at the foot of a rock, from whence he contemplated at a distance the sea agitated by the winds of the south. Its olive colored waves were whitened with foam, which fell back in girandoles the whole length of the strand. The fishing-boats, appearing and disappearing alternately between the swelling surges, ventured at the risk of running aground on the beach, to trust their safety to their insignificance; whereas large vessels, in full sail, under the violent pressure of the winds, kept at a cautious distance, in the dread of being shipwrecked. At the bottom of the gulph, crowds of women and children raised their hands to heaven, and uttered the cries of solicitude, at

sight of the danger which threatened these poor mariners, and of the succession of billows which rolled from the sea, and broke with a noise like thunder on the rocks of Steniclaros. The echoes of Mount Lyceum reverberated their hoarse and confused roaring from all quarters, with so much exactness, that *Tirteus*, at times, turned round his head, imagining that the tempest was behind him, and that the sea was breaking on the top of the mountain. But the cries of the coots and the sea-gulls, which came, flapping their wings, to seek refuge there, and the flashes of lightning which furrowed their horizon, soon made him sensible that safety was on the dry land, and that the tempest was still more dreadful at a distance than it appeared to his view.

Tirteus compassionated the destiny of seamen, pronounced that of shepherds to be blessed, as it, in some degree, resembled that of the gods, by placing tranquility in his heart, and the tempest under his feet.

While he was expressing his gratitude to Heaven, two men of a noble deportment appeared on the great road, which winded below, toward the base of the mountain. One of them was in the full vigor of life, and the other still in the bloom of youth. They were walking with great speed, like travellers impatient to reach their object, as soon as they were within hearing, the

elder of the two called to *Tirteus*, asking if they were not on the road to Argos. But the noise of the wind among the pines, preventing his voice from being heard, the younger ascended toward the shepherd, and cried aloud to him; "Father are we not upon the road to Argos?" "My son," replied *Tirteus*, "I do not know where Ar-
"gos lies. You are in Arcadia, upon the road to
"Tegeum, and those towers which you see before
"you are the towers of Bellemine." While they were talking, a shagged dog, young and frolicsome, which accompanied the stranger, having perceived in the flock a she goat entirely white, ran up to play with her; but the goat terrified at the sight of this animal, whose eyes were covered all over with hair, fled toward the top of the mountain, whither the dog pursued her. The young man recalled his dog, which immediately returned to his feet, lowering his head, and wagging his tail. He then slipped a leash round the dog's neck, and begging the shepherd to hold him fast, he ran after the goat, which still continued to flee before him: the dog, however, seeing him ready to disappear, gave so violent a jerk to *Tirteus*, that he made his escape with the leash about his neck, and ran with such speed, that in a short time, neither goat, traveller, nor dog, were to be seen.

The traveller who had remained on the high-way, was preparing to follow his companion, when the shepherd thus addressed him: "Sir, the weather is boisterous, night approaches, the forest and the mountain are full of quagmires, where you may be in danger of losing yourself. Come and repose yourself a while in my cottage, which is not far from hence. I am perfectly sure that my goat, which is very tame, will return of herself, and bring back your friend to us, provided he does not lose sight of her." In saying these words, he applied his pipe to his mouth, and the flock immediately began to file off by a path toward the summit of the mountain. A large ram marched at the head of this little flock; he was followed by six she-goats, whose dugs almost touched the ground; twelve ewes, accompanied by their lambs, which were already considerably grown, came next; a she ass and her colt closed the procession.

The stranger followed *Tirteus* in silence. They ascended about six hundred paces, along an open down, planted here and there with broom and rosemary: As they were entering the forest of oaks, which covers the top of Mount Lyceum, they heard the barking of a dog; soon after, they descried the young man's shock running toward them, followed by his master, who carried the white goat on his shoulders. *Tirteus* said to him, "My son,

though this goat is dearer to me than any other of the whole flock, I would rather have lost her, than that you should have endured so much fatigue in recovering her; but, if you please, you shall this night repose in my cottage; and to-morrow, if you are resolved to continue your journey, I will conduct you to Tegeum, where you may be informed of the road to Argos. Notwithstanding, sirs, if I may be permitted to advise, you will not depart from hence to-morrow. It is the feast of *Jupiter*, on Mount Lyceum, and people assemble here in multitudes, from all Arcadia, and from a great part of Greece. If you are so good as to accompany me thither, when I present myself at the altar of *Jupiter*, I shall be rendered more acceptable, by adoring him in company with my guests." The young stranger replied: "Oh, good shepherd, we accept with cheerfulness your hospitality for this night, but to-morrow, with the dawn, we must pursue our journey toward Argos. We have for a long time been contending with the waves, in order to reach that city, celebrated over the whole earth for its temples, for its palaces, and from its being the residence of the great *Agamemnon*."

After he had thus spoken they crossed a part of the forest of Mount Lyceum, toward the East, and descended into a little valley sheltered from the winds. A fresh and downy herbage co-

vered the sides of its hills. At the bottom flowed a rivulet called Achelöus, which falls into the river Alpheus, whose islands, covered with alders and linden trees are perceptible at a distance from the plain. The trunk of an old willow, laid low by the hand of time, served as a bridge to the Achelöus; this bridge had no ledging, except some large reeds, which grew on each side of it; but the brook, the bottom of which was paved with rocks, was so easily forded over, and so little use made of the bridge, that the convolvolus almost entirely covered it with its heart-shaped foliage, and with flowers resembling white spires.

At a little distance from the bridge stood the dwelling of *Tirteus*. It was a small house covered with thatch, built in the middle of a mossy ground. Two poplars formed a shade for it to the West. On the South side, a vine surrounded the doors and windows, with its purple clusters, and with its leaves, already of the color of fire. An old ivy sheltered it from the North, and covered with its evergreen foliage, a part of the stair-case, which led on the outside to the upper story.

As soon as the flock approached the house, they began to bleat according to custom. Immediately a young girl appeared, descending the stair-case, and carrying under her arm a vessel

to receive the milk which she was going to draw. Her robe was of white wool; her chesnut locks were turned up under a hat, formed of the rind of the linden tree; her arms and feet were naked, and for shoes she wore socks, as is the fashion of the young women of Arcadia. From her shape, you would have thought her one of the nymphs of *Diana;* from her vase, that she was the Naïad of the fountain; but her timidity soon discovered her to be a shepherdess. As soon as she perceived the strangers, she cast down her eyes and blushed.

Tirteus said to her; "*Cyanea*, my daughter, "make haste to milk your goats, and to prepare "something for supper, while I warm some water to wash the feet of these travellers, whom *Jupiter* has sent to us." In the mean while, he entreated the strangers to repose themselves on a grass plat, at the foot of the vine. *Cyanea*, having kneeled down on the turf, milked the goats, which had assembled around her; and having finished, she led the flock into the sheep-fold, which stood at one end of the house. *Tirteus*, in the mean time, warmed water, and washed the feet of his guests, after which, he invited them to walk in.

Night was already advanced; but a lamp suspended from the cieling, and the blaze of the hearth, which was placed after the manner of

the Greeks, in the middle of the habitation, sufficiently illuminated the interior of it. There were seen, hanging round the walls, flutes, shepherd's crooks, scrips, moulds for making cheese; baskets of fruit, and earthen pans full of milk, stood upon shelves fastened to the joists. Over the door by which they had entered, there was a small statue of the good *Ceres*, and over that of the sheepfold, the figure of the god *Pan*, formed from the root of an olive tree.

As soon as the strangers were introduced, *Cyanea* covered the table, and served up cabbages with bacon, some wheaten bread, a pot filled with wine, a cream cheese, fresh eggs, and some of the second figs of the year, white and violet-colored. She placed by the board four seats, made of oak wood. She covered that of her father with the skin of a wolf, which he himself had killed in hunting. Afterwards having ascended to the upper story, she returned again, with the fleeces of two sheep; but whilst she spread them on the seats of the travellers, she burst into tears. Her father said to her: "My dear daughter, will you remain forever inconsolable about the loss of your mother? And can you never touch any thing which she was accustomed to use, without shedding tears?" *Cyanea* made no reply, but turning her head toward the wall, she wiped her eyes. *Tirteus* addressed a prayer,

and offered a libation to *Jupiter*, the patron of hospitality; then having invited his guests to sit down, they all began to eat in profound silence.

When the meal was finished, *Tirteus* said to the two travellers, "My dear guests, had you chanced to enter the habitation of some other inhabitant of Arcadia, or had you passed this way, some years ago, you would have been much better received. But the hand of *Jupiter* has smitten me. I once possessed, upon the neighboring hill, a garden, which supplied me, at all seasons, with pulse, and excellent fruit: It is swallowed up in the forest. This solitary valley once resounded with the lowing of my oxen. Nothing was to be heard from morn to eve, in my dwelling, but songs of mirth, and sounds of joy. I have seen around this table three sons and four daughters. The youngest son was arrived at an age capable of tending a flock of sheep. My daughter *Cyanea* dressed her little sisters, and already supplied the place of a mother to them. My wife, industrious, and still young, maintained all the year round, gaiety, peace, and abundance in my habitation. But the loss of my eldest son has been followed by that of almost my whole family. Like other young men, he was desirous of shewing his agility, by climbing up the highest trees, His mother to whom such exercises caused the greatest

dread, had frequently entreated him to abstain from amusements of this kind. I had often predicted that some misfortune would be the consequence. Alas! the Gods have punished my unwarrantable predictions, by accomplishing them.

"One summer's day, in which my son was in the forest keeping the flocks with his brothers, the youngest of them took a fancy to eat some of the fruit of a wild cherry tree. The eldest immediately climbed it in order to gather them; and when he had reached the summit, which was very elevated, he perceived his mother at a little distance, who, seeing him in her turn, uttered a loud scream and fainted. At this sight, terror or repentance seized my unhappy son—he fell. His mother, being brought to herself by the cries of her children, ran toward him, but in vain attempted to re-animate him in her arms: The unfortunate youth turned his eyes toward her, pronounced her name and mine, and expired. The grief with which my wife was overwhelmed, carried her in a few days to the grave. The most tender union reigned amongst my children, and equalled their affection for their mother. They, however, all died through sorrow for her loss, and for that of each other. How much anxiety has it cost me to preserve this poor girl!" .... Thus spake *Tirtcus*, and, in spite of his efforts, the tears rushed to his eyes. *Cyanca* threw herself on the

bosom of her father, and mixing her tears with his, she pressed him in her arms, unable to utter a syllable. *Tirteus* said to her: "*Cyanea*, my dear daughter, my sole consolation, cease to afflict thyself. We shall one day see them again; they are with the gods." Thus he spoke, and serenity once more appeared on his countenance, and on that of his daughter. With the greatest composure, she poured out some wine into each of the cups; then, taking a spindle and a distaff, furnished with wool, she seated herself by her father, and began to spin, looking at him, and supporting herself on his knees.

The travellers, in the mean time, were melted into tears. At length the younger of the two, resuming the conversation, said to *Tirteus*, "had we been received into the palace, and at the table of *Agamemnon*, at that instant, when covered with glory, he was restored to his daughter *Iphigenia*, and to his wife *Clytemnestra*, who had languished for his return so long, we could neither have seen nor heard any thing so affecting as what we have just witnessed.—Oh! my good shepherd! it must be acknowledged, that you have experienced severe trials; but if *Cephas*, whom you see here, would relate to you those which overwhelm men, in every quarter of the globe, you would spend this whole night in listening to him, and in bles-

sing your own lot: How many sources of distress are unknown to you, in the midst of this peaceful retreat! You here live in perfect freedom; Nature supplies all your wants; paternal love renders you happy, and a mild religion consoles you under all your griefs."

Cephas, taking up the conversation, said to his friend, "My son, relate to us your own misfortunes: *Tirteus* will listen to you with more interest than he would to me. In mature age, virtue is generally the fruit of reason; in youth it is always that of feeling."

"*Tirteus*, addressing himself to the young stranger, said, "Persons of my age do not sleep much. If you are not over oppressed with fatigue, I shall receive great pleasure from hearing you. I have never quitted my own country, but I love and honor travellers. They are under the protection of *Mercury* and of *Jupiter*. Something useful may always be gathered from them. As for yourself, you must certainly have experienced great distress in your own country, having, at so early an age, separated from your parents, with whom it is so pleasant to live and to die."

"Though it is difficult," replied the young man, "to speak always of ourselves with sincerity, yet, as you have given us so kind a reception, I shall candidly relate to you all my adventures, both good and bad."

Section II.

AMASIS.

My name is *Amasis*. I was born at Thebes, in Egypt, the son of an opulent father. He had me educated by the priests of the temple of Osiris. They instructed me in all the sciences upon which Egypt values herself: The sacred language by which you may converse with ages past, and that of the Greeks, which enables us to hold converse with all the nations of Europe. But what is infinitely superior to sciences and languages, they taught me to be just, and to speak the truth, to fear the gods only, and to prefer before every thing else, that glory which is acquired by virtue.

This last sentiment increased in me as I grew up. Nothing had been spoken of in Egypt, for some time past, but the *Trojan* war. The name of *Achilles*, of *Hector*, and of other heroes, disturbed my sleep. I would have purchased a single day of their renown, by the sacrifice of my whole life. I thought the destiny of my countryman *Memnon* was enviable, who had perished on the walls of Troy, and in honour of whom a superb monument was reared at Thebes. What

do I say? I would willingly have given my body to be changed into the statue of a hero, provided they had exposed me, on a pillar, to the veneration of nations. I resolved then, to tear myself from the delights of Egypt, and from the endearments of my paternal mansion, in order to acquire an illustrious reputation. Every time that I presented myself before my father, "Send me to the siege of Troy," said I to him, that I may purchase for myself a name renowned among men. You have my elder brother with you, who is sufficient to secure the continuance of your posterity: If you always oppose my inclinations, through the dread of losing me, know, that if I escape the sword, I shall not escape the more painful death of chagrin." In truth, I was visibly declining; I avoided all society, and was so recluse, that they gave me the sirname of *Moneros*. To no purpose did my father attempt to combat a sentiment, which was the fruit of the education he had given me.

One day he introduced me to *Cephas*, exhorting me to follow his counsels. Though I had never seen *Cephas* before, a secret sympathy attached me to him, the moment I beheld him. This respectable friend did not endeavor to oppose my favorite passion, but, in order to weaken it, he changed the object: "You thirst after glory," said he to me; "it is, undoubtedly, the

most desirable thing in the world, since the gods reserve it for themselves as their peculiar portion. But how can you reckon upon obtaining it at the siege of Troy? Which side would you take; that of the Greeks or of the Trojans? Justice declares for Greece; compassion and duty for Troy. You are an Asiatic; would you, then, combat in favor of Europe against Asia?—Would you bear arms against *Priam*, that father, and that king so unfortunate, ready to sink, with his family and empire, under the arms of Greece? On the other hand, would you undertake the defence of the ravisher *Paris*, and of the adulteress *Helen* against *Menelaus*, her husband? There is no true glory independent of justice. But, even though a free man were able to ascertain, in the quarrels of kings, on which side justice lay, do you conceive, that in following it, would consist the greatest possible glory that can be acquired? Whatever applauses conquerors may receive from their compatriots, trust me, mankind know well how to place them, one day, in their proper situation. They have given only the rank of heroes and of demi-gods to those who have merely practised justice, such as *Theseus*, *Hercules*, *Pirithöus*. But they have raised to the supreme order of deity, those who have been beneficent; such as *Isis*, who gave laws to men; *Osiris*, who taught them the Arts, and

Navigation; *Apollo*, Music; *Mercury*, Commerce; *Pan*, the art of breeding cattle; *Bacchus*, the cultivation of the vine; *Ceres*, that of corn. I am a native of Gaul," continued *Cephas*; "it is a country naturally rich and fertile, but which, for want of civilization, is destitute of the greater part of those things which minister to happiness. Let us go, and carry thither the arts, and the useful plants of Egypt; a humane religion, and social laws: We may, perhaps, bring back some commodities useful to your own country. There does not exist a nation, however savage it may be, that does not possess some ingenuity, from which a polished people may derive benefit; some ancient tradition, some rare production, which is peculiar to its own climate. It is thus that *Jupiter*, the father of mankind, was desirous of uniting, by a reciprocal interchange of benefits, all the nations of the earth; poor or rich, barbarian or civilized. Even if we should be unable to find in Gaul any thing that can be useful in Egypt, or were we, by some accident, to lose the fruit of our voyage, still there will remain for us one thing, of which neither death nor tempests can deprive us; I mean the satisfaction of having done good.

This discourse, suddenly, illuminated my mind with a ray of divine light. I embraced *Cephas*, with tears in my eyes; "let us depart,"

said I to him; "let us do good to mankind, and imitate the gods!"

My father approved of our project; when I took my leave of him, he folded me in his arms, saying, "My son, you are going to undertake the most difficult task in the world, for you are going to engage in labor for the benefit of mankind. But if you can, by such means, promote your own happiness, rest assured, that you will render mine complete."

After having taken leave of our friends, *Cephas* and I embarked at Canopus, on board a Phenician vessel, which was going to Gaul for a cargo of furs, and for pewter, to the British islands. We carried with us linen cloths, models of waggons, ploughs, and various looms; pitchers of wine, musical instruments, and grains of different species; among others, those of hemp and flax. We caused to be fastened in chests, round the poop of the ship, on the deck, and even along the cordage, slips of vine, which were in blossom, and fruit trees of various sorts. You might have taken our vessel, covered with vine branches and foliage, for that of *Bacchus* setting out on the conquest of the Indies.

Section III.

THE VOYAGE.

We anchored first on the coast of the Island Crete, in order to take in some plants which were suitable to the climate of Gaul. This island produces a greater quantity of vegetables than Egypt, in the vicinity of which it is situated, from the variety of its temperatures, extending from the burning sands of its shores, up to the snowy region of Mount Ida, the summit of which is lost in the clouds. But, what ought to render it still more valuable to its inhabitants, is, its having been governed by the sage laws of *Minos*.

A favorable wind afterwards drove us from Crete to the height of Melita. This is a small island, the hills of which, being formed of white stone, appear at a distance on the sea like cloth spread out to bleach in the sun. We cast anchor here to lay in water, which is preserved in great purity in cisterns. In vain should we have sought, in this place, for any other species of supply: The island is destitute of every thing, though from its situation, between Sicily and Africa, and from the vast extent of its port, which is divided into several arms, it ought to be the centre of commerce for all the nations of Europe, of Afri-

ca, and even of Asia. Its inhabitants subsist entirely by plunder. We presented them with some seeds of the melon and of the xylon. This is an herb which thrives in the driest places, and the wool of which serves for the manufacture of cloths extremely white and delicate. Though Melita, which is an entire rock, produces almost nothing fit for the subsistence of men and animals, yet there is taken annually, about the autumnal equinox, a prodigious quantity of quails, which repose there on their passage from Europe to Africa. It is an amusing spectacle to see them, fattened as they are, crossing the sea in quantities incredible. They wait till the wind blows from the north, when, raising one of their wings in the air like a sail, and beating with the other like an oar, they graze along the waves, having their rumps loaded with fat. When they arrive at this island, they are so fatigued that they may be caught with the hand. A man can gather more in one day than he can make use of in a year.

From Melita we were wafted by the gale as far as the Isles of Enosis, which are situated at the southern extremity of Sardinia. There the winds became contrary, and obliged us to anchor. These islands consist of sandy rocks, which produce nothing; but, by a wonderful interposition of the providence of the gods, who, in places the

most unproductive, finds the means of supporting man in a thousand different ways, tunnies are given to these islands as quails are to the rock of Melita. In spring, the tunnies, which make their way from the ocean into the Mediterranean, pass in such great quantities, between Sardinia and the islands of Enosis, that their inhabitants are occupied, night and day, in fishing for them, in salting them, and in extracting their oil. I have seen upon their shores heaps of the burnt bones of these fishes, which were higher than this house. But this gift of Nature does not render the inhabitants affluent. They fish for the benefit of the inhabitants of Sardinia. Thus we saw slaves only in the islands of Enosis, and tyrants alone at Melita.

The wind becoming favorable, we departed, after having presented the inhabitants with some slips of vine, and received from them some young plants of the chesnut tree, which they import from Sardinia, where the fruit of these trees grows to a considerable size.

During the voyage, *Cephas* pointed out to me the variegated aspects of the land, not one of which Nature has made similar to another, in quality, and in form; in order that divers plants and animals may find, in the same climate, different temperatures. When nothing was to be perceived but the heavens and the water, he called my

attention to men. "Observe," said he to me, "these seafaring people, howrobust they are! you might take them for tritons. Bodily exercise is the aliment of health. It dissipates an infinite number of diseases and passions, which spring out of the repose of cities. The gods have planted human life in the same manner as the oaks of my country. The more they are buffeted by the winds, the more vigorous they become. The sea," continued he, "is the school of every virtue: There, you live in privations, and dangers of every sort. You are there under the necessity of being courageous, sober, chaste, prudent, patient, vigilant, religious." "But," answered I, "How comes it that the greater part of the companions of our voyage possess none of these qualities? They are, almost all of them, intemperate, violent, impious, commending and blaming, without discernment, whatever they see performed."

"It is not the sea which has corrupted them," replied *Cephas*; "they have brought with them the passions of the land. It is the love of riches, idleness, and the desire of giving themselves up to all manner of irregularities, when on shore, which determines a great number of men to enter into the sea service, for the purpose of enriching themselves; and, as they cannot acquire, without a great deal of trouble, the means of gratifi-

cation on this element, you always see them restless, sullen, and impatient, because there is nothing so discontented as vice, when it finds itself in the road of virtue. A ship is the crucible in which morals are put to the test. There, the wicked degenerate more and more, and the good become better. Virtue, however, can derive advantage from every situation. Profiting by their defects, you may here learn equally to despise abuse, and idle applause; to act so as to merit your own approbation, and to have no other witness of your actions but the gods. He who is desirous of doing good to mankind, must inure himself betimes to submit to unkind treatment from them. It is by the labor of the body, and the injustice of men, that you are enabled to fortify, at once, both your body and your soul. It was by such means that *Hercules* acquired that courage, and that invincible strength, which have raised his glory to the stars."

I followed, then, as far as I was able, the advice of my friend, notwithstanding my extreme youth. I exerted myself in raising the unwieldy sail yards, and in managing the sails. But the least raillery from my companions, who ridiculed my inexperience, entirely disconcerted me. It would have been easier for me to contend with the boisterous elements than with the contempt of

men: Such sensibility to the opinion of others had my education inspired.

We passed the strait which separates Africa from Europe, and saw, on the right and on the left, the two mountains, Calpe and Abila, which fortify the entrance. Our Phenician sailors did not fail to inform us, that their nation was the first of all those of the earth, which had dared to penetrate into the vast ocean, and coast along its shores, even as far as the frozen zone. They placed their own reputation far above that of *Hercules*, who erected, as they said, two pillars at this passage, with the inscription, BEYOND THIS YOU CANNOT PASS, as if the termination of his labors were also to be that of the researches of mankind. *Cephas*, who neglected no opportunity of recalling men to a sense of justice, and of rendering homage to the memory of heroes, said to them, "I have always heard it said, that the ancients ought to be respected. The inventors of a science are the most worthy of commendation, because they open the career to other men. It is less difficult afterwards for those who follow them to extend their progress. A child, mounted on the shoulders of a tall man, sees farther than the person who supports him." *Cephas*, however, spoke to them without effect; they would not deign to render the slightest homage to the son of *Alcmena*. As for ourselves, we

revered the very shores of Spain, where he had killed the three bodied *Geryon*. We crowned our heads with branches of poplar, and, in honor of him, poured out some wine of Thasos on the waves.

We soon discovered the profound and verdant forests which cover Celtic Gaul. It was a son of *Hercules*, called *Galate*, who gave to its inhabitants the sirname of Galatians, or Gauls. His mother, the daughter of one of the kings of Celtes, was of a prodigious stature. She scorned to take a husband from among her father's subjects; but when *Hercules* passed through Gaul, after the defeat of *Geryon*, she could not refuse her heart and hand to the conqueror of a tyrant. We afterwards entered the channel which separates Gaul from the British islands, and, in a few days, we reached the mouth of the Seine, the green waters of which may, at all times, be distinguished from the azure waves of the sea.

Section IV.

THE SEINE.

My joy was complete. We were upon the point of arriving. Our trees were fresh, and covered with leaves. Several of them, and, among others, the slips of the vine, were already

loaded with ripe fruit ; I pictured to myself the joyful reception which we were going to receive from a people destitute of the principal gifts of Nature, when they should see us disembark upon their shores, with the delicate productions of Egypt and of Crete. The labors of agriculture are alone sufficient to fix wandering and unsettled nations, and to deprive them of the inclinations of supporting by violence, that life which Nature sustains with so many blessings. Nothing more than a grain of corn is requisite, said I to myself, in order to polish the whole Gallic nation, by those arts which spring from agriculture. This single grain of flax is sufficient, at some future period, to afford them clothing. This slip of the vine may serve to diffuse gaiety and joy over their festivals, to the latest posterity. I then felt how far superior the works of Nature are to those of man. These last begin to decay the moment that they appear ; the others, on the contrary, carry in themselves the spirit of life which propagates them. Time, which destroys the monuments of art, serves only to multiply those of Nature. I perceived more real benefits inclosed in a single grain of seed, than are to be found in Egypt in the treasuries of her kings.

I gave myself up to these divine and humane speculations, and, in the transports of my joy, I embraced *Cephas*, who had given me so just an

idea of the real wealth of nations, and of true glory. My friend at the same time observed, that the pilot was preparing to stem the current of the Seine, at the entrance of which we now were. Night was approaching; the wind blew from the west, and the horizon was overcast. *Cephas* said to the pilot, "I would advise you not to enter into the river, but rather to cast anchor in that port, beloved of *Amphitrite*, which you see upon the left. Listen to what I have heard related, on this subject, by our ancient seers.

"*Seine*, the daughter of *Bacchus*, and a nymph of *Ceres*, had followed into Gaul, the goddess of agriculture, at the time when she was seeking her lost daughter, *Proserpine*, over the whole earth. When *Ceres* had finished her career, *Seine*, asked, as a reward for her services, those meadows which you see below. The goddess consented, and granted, besides, to the daughter of *Bacchus*, the power of making corn spring up wherever she set her foot. She then left *Seine* upon her shores, and gave her, for a companion and attendant, the nymph *Heva*, who was charged to keep strict watch over her, lest she should be carried off by some sea god, as her daughter *Proserpine* had been, by the prince of the infernal regions. One day, while *Seine* was amusing herself, by running along the sands, to seek for shells, and as she fled, uttering loud screams, before

the waves of the sea, which sometimes wet the soles of her feet, and sometimes reached even to her knees, her companion *Heva* perceived, under the billows, the hoary locks, the empurpled visage, and the azure robe of *Neptune*. This god was returning from the Orcades, after a terrible earthquake, and was surveying the shores of the ocean, with his trident, to examine whether their foundations had not been convulsed. At sight of him, *Heva* uttered a shriek, and warned *Seine*, who immediately tripped toward the meadows. But the god of the seas, having perceived the nymph of *Ceres*, and being struck with the gracefulness of her figure, and her agility, drove his sea horses along the strand, in pursuit of her. He had almost overtaken her, when she implored assistance from her father *Bacchus*, and from *Ceres* her mistress. They both listened to her petition. At the moment that *Neptune* was extending his arms to catch her, the whole body of *Seine* melted into water; her veil, and her green robes, which the wind wafted before her, became waves of an emerald colour. She was transformed into a river of that hue, which still delights to ramble over the places in which she delighted while a nymph. What renders this more remarkable is, that *Neptune*, notwithstanding her metamorphosis, has not ceased

to be enamoured of her, as it is said the river Alpheus, in Sicily, still continues to be, of the fountain Arethusa. But, if the sea god has preserved his affection for *Seine*, she still continues to retain her aversion for him. Twice every day he pursues her, with a loud and roaring noise, and as often *Seine* flies to the meadows, ascending toward her source, contrary to the natural course of rivers. At all seasons she separates her green waves from the azure billows of *Neptune*.

" *Heva* died with regret for the loss of her mistress; but the Nereids, as a reward to her fidelity, erected to her memory, upon the shore, a monument composed of black and white stones, which may be perceived at a very great distance. By a skill divine, they have even enclosed in it an echo, in order that *Heva*, after her death, might warn mariners, both by the eye and the ear, of the dangers of the land, as she had, during her life, cautioned the nymph of *Ceres* against those of the sea. You see her tomb from hence. It is that steep mountain, formed of dismal beds of black and white stones. It always bears the name of *Heva*. You perceive, by those piles of flint stones with which its basis is covered, the efforts used by the enraged *Neptune* to undermine the foundation; and you may hear, from hence, the roaring of the mountain, which warns marin-

ers to take care of themselves. As to *Amphitrite*, deeply affected by the misfortune of *Seine*, and the infidelity of *Neptune*, she entreated the Nereids to hollow out that little bay, which you see upon your left, at the mouth of the river; and it was her intention that it should be, at all times, a secure harbor against the fury of her husband. Enter into it, then, at this time, if you will be ruled by me, while day-light remains. I can assure you that I have, frequently, seen the god of the seas pursue *Seine* far up the country, and overturn every thing which he encountered in his passage. Be on your guard, therefore, against meeting a god whom love has rendered furious."

"You must, surely," answered the pilot to *Cephas*, "take me for a very ignorant fellow, when you relate such stories to a person of my age. It is now forty years since I have followed a sea life. I have anchored night and day in the Thames, which is full of sands, and in the Tagus, which flows with such rapidity; I have seen the cataracts of the Nile, which make a roaring so dreadful, but never have I seen or heard any thing similar to what you have now been relating. I shall hardly be simple enough to remain here at anchor, while the wind is favorable for going up the river. I shall pass the night in its channel, and expect to sleep very soundly."

He spoke, and, in concert with the sailors,

raised a hooting, as ignorant and presumptuous men are accustomed to do, when advice is given them which they do not understand.

Cephas then approached me, and enquired if I knew how to swim. "No," answered I, "I have learnt in Egypt every thing that could render me respectable among men, and almost nothing which could be useful to myself." He then said to me, "Let us not separate from each other; we will keep close to this bench of the rowers, and repose all our trust in the gods."

Section V.

The Shipwreck.

In the mean time the vessel, driven by the winds, and, undoubtedly, by the vengeance of *Hercules* also, entered the river in full sail. We avoided at first, three sand banks, which are situated at its mouth; afterwards, being fairly involved in the channel, we could see nothing around us, but a vast forest, which extended down to the very banks of the river. The only evidence we had of a country inhabited, was some smoke, which appeared rising, here and there, above the trees. We proceeded in this manner till night prevented us from distinguish-

ing any object; then the pilot thought proper to cast anchor.

The vessel, driven on one side by a fresh breeze, and on the other by the current of the river, was forced into a cross position in the channel. But, notwithstanding this dangerous situation, our sailors began to drink and make merry, believing themselves secure from all danger, because they were surrounded with land on every side. They afterwards went to rest, and not a single man remained on deck, to watch the motions of the ship.

Cephas and I staid above, seated on one of the rowers' benches. We banished sleep from our eyes, by conversing on the majestic appearance of the stars which rolled over our heads. Already had the constellation of the bear reached the middle of its course, when we heard, at a distance, a deep roaring noise, like that of a cataract. I imprudently rose up to see what it could be. I perceived, by the whiteness of its foam, a mountain of water, which approached us from the sea, rolling itself over and over. It occupied the whole breadth of the river, and, rushing above its banks to the right hand and to the left, broke with a horrible crash among the trunks of the trees of the forest. In the same instant it came upon our vessel, and taking her sideways, fairly overset her. This movement

tossed me into the water. A moment afterwards a second surge, still more elevated than the former, turned the vessel keel upward. I recollect that I then heard issue from the inverted wreck, a multitude of hollow and stifled screamings; but being desirous of calling my friend to my assistance, my mouth filled with salt water; I felt a murmuring noise in my ears; I found myself carried away with inconceivable rapidity, and soon after I lost all recollection.

I am not sensible how long I might have remained in the water; but when I recovered my senses, I perceived, toward the west, the bow of *Iris* in the heavens, and to the east, the first fires of *Aurora*, which tinged the clouds with silver and vermillion. A company of young girls, extremely fair, half clad in skins, surrounded me: Some of them presented me with liquor in shells, others wiped me dry with mosses, and others supported my head with their hands. Their flaxen hair, their vermillion cheeks, their azure eyes, and that celestial somewhat, which compassion always portrays on the countenance of women, made me believe that I was in heaven, and that I was attended by the hours, who open the gates of it, day by day, for the admission of unfortunate mortals. The first emotion of my heart was to look for you, and the second to enquire after you. Oh, *Cephas!* I could not have felt

my happiness complete, even in Olympus, without your presence. But the illusion was soon over, when I heard a language, barbarous and unknown to me, issue from the rosy lips of these young females. I then recollected, by degrees, the circumstances of my shipwreck. I arose: I wished to seek for you, but knew not where to find you again. I wandered about in the midst of the woods. I was ignorant whether the river, in which we had been shipwrecked, was near, or at a distance, on my right hand, or on my left; and, to increase my embarrassment, there was no person of whom I could enquire its situation.

After having reflected a short time, I observed that the grass was wet, and the foliage of the trees of a bright green, from which I concluded that it must have rained abundantly the preceding night. I was confirmed in this idea by the sight of the water, which still flowed in yellow currents along the roads. I farther concluded that these waters must, of necessity, empty themselves into some brook, and this brook into the river. I was about to follow these indications, when some men, who came out of an adjoining cottage, compelled me with a threatening tone to enter. I then perceived that I was free no longer, and that I had become the slave of a people who, I once flattered myself, would have honored me as a god.

I call *Jupiter* to witness, O *Cephas*, that the affliction of having been shipwrecked in port, of seeing myself reduced to servitude by those for whose benefit I had travelled so far, of being relegated to a barbarous country, where I could make myself understood by no person, far from the delightful country of Egypt, and from my relations, did not equal the distress which I felt in having lost you. I called to remembrance the wisdom of your counsels, your confidence in the gods, of whose providence you taught me to be sensible, even in the midst of the greatest calamities; your observations on the Works of Nature, which replenished her to me, with life and benevolence; the tranquility in which you so well knew how to maintain all my passions: And I felt, by the gloom which was gathering around my heart, that I had lost in you the first of blessings, and that a prudent friend is the most valuable gift which the bounty of the gods can bestow upon man.

Thus, I thought of nothing, but of the means of regaining you once more, and I flattered myself that I should succeed, by making my escape in the middle of the night, if I could only reach the sea coast. I was persuaded that I could not be far distant from it, but I was entirely ignorant on which side it lay. There was no eminence near me from whence I could discover it. Sometimes, I mounted

to the summit of the most lofty trees, but I could perceive nothing except the surface of the forest, which extended as far as the horizon. Often did I watch the flight of the birds to see if I could discover some sea fowl coming on shore to build her nest in the forest; or some wild pigeon going to pilfer salt from the shores of the ocean. I would, a thousand times, have preferred the sound of the piercing cries of the sea thrush, when, she comes, during a tempest, to shelter herself among the rocks, to the melodious voice of the red breast, which already announced, in the yellow foliage of the woods, the termination of the fine weather.

Section VI.

The Gauls.

One night, after I had retired to rest, I thought I heard, at a distance, the noise which the waves of the sea make, when they break upon its shores; that I could even distinguish the tumult of the waters of the *Seine* pursued by *Neptune*. Their roarings, which had formerly chilled me with horror, at that time transported me with joy. I arose: I went out of the cottage, and listened attentively; but the sounds,

which seemed to issue from various parts of the horizon, soon perplexed my understanding: I began to discover that it was the murmurings of the winds; which agitated at a distance the foliage of the oaks, and of the beech-trees.

Sometimes I endeavored to make the savages of my cottage comprehend that I had lost a friend. I applied my hand to my eyes, to my mouth, and to my heart; I pointed to the horizon; I raised my hands, clasped, to heaven, and shed tears. They understood this dumb language by which I expressed my affliction, for they wept with me; but, by a contradiction, for which I could not account, they redoubled their precautions, in order to prevent me from making my escape.

I applied myself, therefore, to learn their language, that I might inform them of my condition, and in order to interest them in it. They were themselves eagerly disposed to teach me the names of the objects which I pointed out to them. Slavery is very mild among these nations. My life, liberty excepted, differed in nothing, from that of my masters. Every thing was in common between us, provision, habitation, and the earth upon which we slept, wrapped up in skins. They had even so much consideration for my youth, as to give me the easiest part of their labors to perform. In a short time, I was

able to converse with them. This is what I learnt of their government and character.

Gaul is peopled with a great number of petty nations, some of which are governed by kings, others by chiefs, called Iarles; but all subjected to the power of the Druids, who unite them all under the same religion, and govern them with so much the greater facility, that they are divided by a thousand different customs. The Druids have persuaded these nations that they are descended from *Pluto*, the god of the infernal regions, whom they call *Hœder*, or the blind. This is the reason that the Gauls r eckon by nights, and not by days, and that they reckon the hours of the day from the middle of the night, contrary to the practice of all other nations. They adore several other gods as terrible as *Hœder*; such as *Niorder*, the master of the winds, who dashes vessels on their coasts, in order, they say, to procure them plunder. They accordingly believe, that every ship which is wrecked on their shores is sent them by *Niorder*. They have, besides, *Thor*, or *Theutates*, the god of war, armed with a club, which he darts from the upper regions of the air; they give him gloves of iron, and a belt, which redoubles his fury when it is girded around him. *Tir*, equally cruel; the silent *Vidar*, who wears shoes of considerable thickness; by means of which he can walk through

the air, and upon the water without making any noise; *Hemdal*, with the golden tooth, who sees day and night: He can hear the slightest sound, even that which the grass or the wool makes as they grow: *Ouller*, the god of the ice, shod with skates; *Loke*, who had three children by the giantess *Anghebode:* The messenger of grief, namely, the wolf *Fenris*, the serpent of *Midgard*, and the merciless *Hela*. *Hela* is death. They say, that his palace is misery; his table, famine; his door, the precipice; his porch, languor; and his bed, consumption. They have, besides, several other gods, whose exploits are as ferocious as their names, *Herian*, *Riflindi*, *Svidur*, *Svidrer*, *Salsk*, which, translated, mean the warrior, the thunderer, the destroyer, the incendiary, the father of carnage. The Druids honor these divinities with funeral ceremonies, lamentable ditties, and human sacrifices. This horrible mode of worship gives them so much power over the terrified spirits of the Gauls, that they preside in all their councils, and decide upon all their affairs. If any one presumes to oppose their judgment, he is excluded from the communion of their mysteries; and from that moment he is abandoned by every one, not excepting his own wife and children; but it seldom happens that any one ventures to resist them; for they arrogate to themselves, exclusively, the charge of edu-

cating youth, that they may impress upon their minds, early in life, and in a manner never to be effaced, these horrible opinions.

As for the Iarles, or Nobles, they have the power of life and death over their own vassals. Those who live under kings pay them the half of the tribute which is leviled upon the commonality. Others govern them entirely to their own advantage. The richer sort give feasts to the poor of their own particular class, who accompany them to the wars, and make it a point of honor to die by their side. They are extremely brave, if, in hunting, they encounter a bear, the chief amongst them lays aside his arrows, attacks the animal alone, and kills him with one stroke of his cutlass. If the fire catches their habitation, they never quit it till they see the burning joists ready to fall upon them. Others, on the brink of the ocean, with lance or sword in hand, oppose themselves to the waves which dash upon the shore. They suppose valor to consist, not only in resisting their enemies of the human species, and ferocious animals, but even the elements themselves. Valor, with them, supplies the place of justice. They always decide their differences by force of arms, and consider reason as the resource of those only who are destitute of courage. These two classes of citizens, one of which employs cunning, and the other force, to make

themselves feared, completely balance each other; but they unite in tyrannizing over the people, whom they treat with sovereign contempt. Never can a Plebeian, among the Gauls, arrive at the honor of filling any public station. It would appear, that this nation exists only for its Priests and its Nobles. Instead of being consoled by the one, and protected by the other, as justice requires, the Druids terrify them, only in order that the Iarles may oppress them.

Notwithstanding all this, there is no race of men possessed of better qualities than the Gauls. They are very ingenious, and excel in several species of useful arts, which are to be found no where else. They overlay plates of iron with tin so artfully, that it might pass for silver. They compact pieces of wood with so much exactness, that they form of them vases capable of containing all sorts of liquors. What is still more wonderful, they have a method of boiling water in them, without their being consumed. They make flint stones red hot, and throw them into the water contained in the wooden vase, till it acquires the degree of heat which they wish to give it. They also know how to kindle fire without making use either of steel or of flint, by the friction of the wood of the ivy and of the laurel. The qualities of their heart are still superior to those of their understanding. They are extreme-

ly hospitable. He who has little, divides that little cheerfully with him who has nothing. They are so passionately fond of their children, that they never treat them unkindly. They are contented with bringing them back to a sense of their duty by remonstrance. The result from this conduct is, that at all times the most tender affection unites all the members of their families, and that the young people there listen with the greatest respect to the counsels of the aged.

Nevertheless, this people would be speedily destroyed by the tyranny of its chieftains, did they not oppose their own passions to themselves. When quarrels rise among the nobility, they are so much under the persuasion that arms must decide the controversy, and that reason has no voice in the decision, that they are obliged, in order to merit popular esteem, to follow up their resentments to the death. This vulgar prejudice is fatal to a great number of the Iarles. On the other hand, they give such credit to the dreadful stories retailed by the Druids, respecting their divinities, and fear, as is generally the case, associates with these traditions circumstances so terrifying, that the Priests frequently tremble much more than the people, before the idols which they themselves had fabricated. I am, thence, thoroughly convinced of the truth of the maxim of our sacred books, which says—*Jupiter* has or-

dained, that the evil which a man does to his fellow creature, should recoil, with sevenfold vengeance, upon himself, in order that no one may find his own happiness in the misery of another.

There are, here and there, among some of the Gallic nations, kings who establish their own authority, by undertaking the defence of the weak; but it is the women who preserve the nation from ruin. Equally oppressed by the laws of the Druids, and by the ferocious manners of the Iarles, they are doomed to the most painful offices, such as cultivating the ground, beating about in the woods, to start game for their huntsmen, and carrying the baggage of the men on their journies. They are, besides, subjected, all their life long, to the imperious governance of their own children. Every husband has the power of life and death over his wife, and when he dies, if there arises the slightest suspicion that his death was not natural, they put his wife to the torture: If, through the violence of her torments, she pleads guilty, she is condemned to the flames.

This unfortunate sex triumphs over its tyrants by their own opinions. As vanity is their domineering passion, the women turn them into ridicule. A song simply is, in their hands, sufficient to destroy the result of their gravest assemblies. The lower classes, and especially the young peo-

ple, always devoted to their service, set this song into circulation, through the villages and hamlets. It is sung day and night: He who is the subject of it, be he who he may, dares to show his face no more. Hence it comes to pass, that the women, so weak as individuals, enjoy, collectively, the most unlimited power. Whether it be the fear of ridicule, or, that they have experienced the superior discernment of their women, but certain it is, the Chieftains undertake nothing of importance, without consulting them. Their voice decides, whether it is to be peace or war. As they are obliged, by the miseries of society, to renounce their own opinions, and to take refuge in the arms of Nature, they are neither blinded nor hardened, by the prejudices of the men. Hence it happens, that they judge more clearly than the other sex, of public affairs, and foresee future events with such superior discernment. The common people, whose calamities they solace, struck, at frequently finding in them a more discriminating understanding than in their chiefs, without penetrating into the causes of it, take a pleasure in ascribing to them something divine.

Thus, the Gauls pass successively and rapidly from sorrow to fear, and from fear to joy. The Druids terrify them, the Iarles abuse them, and the women make them laugh, dance, and sing.

Their religion, their laws, and their manners, being perpetually at variance, they live in a state of continual fluctuation, which constitutes their principal character. Hence, also may be derived the reason why they are so very curious about news, and so desirous of knowing what passes among strangers. It is for this reason, that so many are to be found in foreign countries, which they are fond of visiting, like all men who are unhappy at home.

They despise husbandmen, and of consequence, neglect agriculture, which is the basis of public prosperity. When we landed in their country, they cultivated only those grains which come to perfection in the space of a summer, such as beans, lentiles, oats, small millet, rye, and barley. Very little wheat is to be seen there. Nevertheless, the earth abounds with natural productions. There is a profusion of excellent pasture by the side of the river. The forests are lofty, and filled with fruit trees of all kinds. As they were frequently in want of provisions, they employed me in seeking it for them, in the fields and in the woods. I found, in the meadows, cloves of garlic, the roots of the dancus, and of the dropwort. I sometimes returned, loaded with myrtle berries, beech mast, plums, pears, and apples, which I had gathered in the forest. They dressed these fruits, the greater part of which cannot be eaten

raw, on account of their harshness. But they have trees there, which produce fruit of an exquisite flavor. I have often admired the apple trees, loaded with fruit of a color so brilliant, that they might have been mistaken for the most beautiful flowers.

This is what they related, respecting the origin of those apple trees, which grow there in such abundance, and of the greatest beauty. They tell you, that the beautiful *Thetis*, whom they call *Friga* jealous of this circumstance, that, at her nuptials, *Venus*, whom they denominate *Siofne*, had carried away the apple, which was the prize of beauty, without putting it in her power to contest it with the three goddesses, resolved to avenge herself.

Accordingly, one day that *Venus* had descended on this part of the Gallic shore, in quest of pearls for her dress, and of the shells called the knife handle, for her son *Sisione*, a triton stole away her apple, which she had deposited upon a rock, and carried it to the goddess of the seas. *Thetis* immediately planted its seeds in the neighboring country, in order to perpetuate the memory of her revenge, and of her triumph. This is the reason, say the Celtic Gauls, of the great number of apple trees which grow in their country, and of the singular beauty of their young women.

Section VII.

The Seasons.

WINTER came on, and I am unable to express my astonishment to you, when I beheld, for the first time, the heavens dissolve into white plumage, resembling that of birds, the water of the fountains became hard as stone, and the trees entirely stripped of their foliage. I had never seen the like in Egypt. I had no doubt but that the Gauls would immediately expire, like the plants, and the elements, of their country; and, undoubtedly, the rigor of the climate would have soon have put an end to my career, had they not taken the greatest care to clothe me with furs. But how easy is it for a person, without experience, to be deceived! I was entirely ignorant of the resources of Nature; for every season, as well as for every climate. Winter is, to those northern nations, a time of festivity, and of abundance. The river birds, the elks, the buffalos, the hares, the deer, and the wild boars, abound at that season, in the forests, and approach their habitations. They killed these in prodigious quantities.

I was not less surprised when I beheld the return of spring, which displayed, in those deso-

late regions, a magnificence which I had never seen before, even on the banks of the Nile: The bramble, the raspberry, the sweet briar, the strawberry, the primrose, the violet, and a great many other flowers, unknown in Egypt, adorned the verdant borders of the forests. Some, such as the honey-suckle, entwined themselves round the trunks of the oaks, and suspended from the boughs their perfumed garlands. The shores, the rocks, the woods, and the mountains, were all clothed in a pomp, at once magnificent and wild. A spectacle so affecting redoubled my melancholy: "Happy," said I to myself, "if I could perceive among so many plants, a single one of those which I brought with me from Egypt! Were it only the humble flax, it would recal the memory of my country, during my whole life time; in dying, I would select it for the place of my grave: It would one day tell *Cephas* where the bones of his friend repose, and inform the Gauls of the name and of the travels of *Amasis*."

Section VIII.

The Druids.

One day, as I was endeavoring to dissipate my melancholy, by looking at the young girls dancing on the fresh grass, one of them

quitted the dancers, and came and wept over me: Then, on a sudden, she again joined her companions, and continued to dance, frisking about, and amusing herself with them. I took the sudden transition from joy to grief, and from grief to joy, in this young girl, to be the effect of the natural levity of the people, and I did not give myself much trouble about it; when I saw an old man issue from the forest, with a red beard, clothed in a robe made of the skins of weasels. He bore a branch of mistletoe in his hand, and at his girdle hung a knife of flint. He was followed by a company of young persons, in the flower of their age, who had girdles of the same sort of skins, and holding in their hands empty gourds, pipes of iron, bullocks' horns, and other instruments of their barbarous music.

As soon as this old man appeared, the dancing ceased, every countenance became sad, and the whole company removed to a distance from me. Even my master and his family retired to their cottage. The wicked old man then approached me, and fastened a leathern cord round my neck; then, his satellites, forcing me to follow him, dragged me along, in a state of stupefaction, in the same manner as wolves would carry off a sheep. They conducted me across the forest to the very borders of the Seine: There, their chief sprinkled me with the water of the river;

he then made me enter a large boat, constructed of the bark of the birch tree, into which he likewise embarked with all his train.

We sailed up the Seine for eight days together, during which all kept a profound silence. On the ninth we arrived at a little town, built in the middle of an island. They here made me disembark on the opposite shore, on the right hand bank of the river, and they conducted me into a large hut, without windows, which was illuminated by torches of fir. They tied me to a stake in the middle of the hut, and those young men, who watched over me night and day, armed with hatchets of flint, never ceased to dance around me, blowing with all their strength, thro' the bulls' horns and iron pipes. They accompanied this detestable music with these horrible words, which they sung in chorus:

"Oh, *Niorder!* Oh, *Riflindi!* Oh, *Svidrer!* Oh, *Hela!* Oh, *Hela!* God of carnage and of storms, we bring thee flesh. Receive the blood of this victim, of this child of death. Oh, *Niorder!* Oh, *Riflindi!* Oh, *Svidrer!* Oh, *Hela!* Oh, *Hela!*"

Whilst they pronounced these awful words, their eyes rolled about in their heads, and their mouths foamed. At length those fanatics, overwhelmed with fatigue, fell asleep, except one of them, who was called *Omfi*. This name, in the

Celtic tongue, signifies beneficent. *Omfi*, moved with compassion, approached me: "Unfortunate young man," said he "a cruel war has broken out between the nations of Great Britain and those of Gaul. The Britons pretend to be the masters of the sea, which separates their island from us. We have already been defeated in two naval engagements with them. The college of the Druids of Chartres has determined, that human victims are necessary, to render *Mars* favorable, whose temple is just by this place. The chief of the Druids, who has spies over all the Gauls, has discovered that the tempests had cast you upon our coasts: He went himself to find you out. He is old and pitiless. He bears the name of two of our most formidable deities. He is called *Tor-Tir*. Repose thy confidence, then, in the gods of thy own country, for those of Gaul demand thy blood!"

I was seized with such terror, that I was unable to make the least reply to *Omfi*: I only thanked him, by an inclination of my head, and he immediately hastened from me, lest he should be perceived by any of his companions.

At that moment, I called to mind the reason which induced the Gauls, who had made me their slave, to hinder me from removing from their habitation; they were apprehensive that I might fall into the hands of the Druids: but I

had not the power of escaping my cruel destiny. My destruction now appeared so inevitable in my own eyes, that I did not believe *Jupiter* himself was able to deliver me from the jaws of those tygers, who were thirsting for my blood. I recollected no more, oh, *Cephas!* what you have so frequently told me, that the gods never abandon innocence. I did not even remember their having saved me from shipwreck. Present danger totally obliterates past deliverance from the mind. Sometimes, I imagined that they had preserved me from the waves, only to give me up to a death a thousand times more painful.

Nevertheless, I was addressing my supplications to *Jupiter*, and I enjoyed a kind of repose, in relying entirely on that providence which governs the world, when, all of a sudden, the doors of the cottage opened, and a numerous company of Priests entered, with *Tor Tir* at their head, always bearing in his hand a branch of mistletoe from the oak. Immediately, the young barbarians who surrounded me awoke, and began their funeral songs and dances. *Tor Tir* approached me: he placed upon my head a crown of the yew tree, and a handful of the meal of beans; afterwards, he put a gag in my mouth, and having untied me from my stake, he fastened my hands behind my back. Then, all his retinue

began to march to the sound of their doleful instruments, and two Druids, supporting me by the arms, conducted me to the place of sacrifice.

Here, *Tirteus*, perceiving that the spindle fell from the hands of *Cyanca*, and that she turned pale, said to her, " my daughter it is time for you to go to rest. Remember that you must rise to-morrow before the dawn, to go to Mount Lyceum, where you have to present, with your companions, the shepherd's offering on the altar of *Jupiter*." *Cyanea*, trembling all over, replied, " my father, every thing is ready against the festival of to-morrow. The wreaths of flowers, the wheaten cakes, the vessels of milk, are all prepared. But it is not late: The moon, as yet, has not illuminated the bottom of the valley, nor have the cocks yet crowed ; it is not midnight. Allow me, I entreat you, to stay here till the end of this story. My father, I am near you, and I shall apprehend no danger."

Tirteus looked at his daughter, with a smile ; and, having made an apology to *Amasis* for interrupting him, entreated he would proceed.

Section IX.

Cephas.

We went out of the hut, replied *Amasis*, in the middle of a dark night, by the smoky light of the torches. We traversed, at first, a vast field of stones; we saw, here and there, the skeletons of horses and of dogs, fixed upon stakes. From thence we arrived at the entrance of a large cavern hollowed in the side of a rock all over white. The lumps of black clotted blood, which had been shed around, exhaled an infectious smell and announced this to be the temple of *Mars*. In the interior of this frightful den, along the walls, were ranged human heads and bones; and, in the middle of it, upon a piece of rock, a statue of iron reared itself to the summit of the cavern, representing the god *Mars*. It was so misshapen, that it had more resemblance to a block of rusty iron than to the god of war. We could distinguish, however, his club, set thick with piercing points, his gloves studded with the heads of nails, and his horrible girdle, on which was portrayed the image of death. At his feet was seated the king of the country, having around him the principal personages of his state. An immense crowd of people were

collected within and without the cavern, who preserved a melancholy silence, impressed with respect, religion, and terror.

Tor Tir, addressing himself to the whole assembly, said to them, "oh, king! and you Iarles assembled for the defence of the Gauls, do not believe that you ever can triumph over your enemies without the assistance of the god of battles. Your losses have demonstrated what is the consequence of neglecting his awful worship. Blood offered up to the gods, saves the effusion of that which mortals shed. The gods ordain men to be born, only that they may die. Oh! how happy are you, that the selection of the victim has not fallen upon one of yourselves! Whilst I was considering within myself whose life among us would be acceptable to the gods, and ready to offer up my own for the good of my country, *Niorder*, the god of the seas, appeared to me in the gloomy forests of Chartres; he was dripping all over with sea water. He said to me, with a voice thundering like the tempest, I send to you, for the salvation of the Gauls, a stranger, without relations, and without friends. I myself dashed him upon the western shores. His blood will be acceptable to the gods of the infernal regions. Thus spake *Niorder*. *Niorder* loves you, oh, ye children of *Pluto!*"

Scarcely had *Tor Tir* made an end of this terrible address, when a Gaul, who was seated by the king, rushed toward me—It was *Cephas!*—"Oh, *Amasis!* Oh, my dear *Amasis!*" cried he. "Oh, my barbarous compatriots! are you going to sacrifice a man, who has come from the banks of the Nile to bring you the most precious blessings of Greece and of Egypt? You shall begin, then, with me, who first inspired him with this desire, and who touched his heart with pity for persons so cruel to him." As he pronounced these words he pressed me in his arms and bathed me with his tears. For my part, I wept and sobbed, without the power of expressing to him, in any other way, the transports of my joy. Immediately the cavern resounded with the voice of murmurs and of groans. The young Druids wept, and let fall from their hands the instruments of my sacrifice; for religion becomes mute whenever Nature speaks. Nevertheless, no one in the assembly durst, even now, deliver me from the hands of the butchering priests, when the women, rushing into the midst of the assembly, tore asunder my chains, and removed my gag and funeral crown. Thus, for the second time, did I owe my life to the women of Gaul.

The king, taking me in his arms, said to me, "What, is it you, unhappy stranger, whom *Cephas*, has been incessantly regretting! oh, ye

gods, the enemies of my country, do you send benefactors hither, only that they may be immolated." Then, addressing himself to the chiefs of the nations, he spoke to them, with so much energy, of the rights of humanity, that, with one accord, they all swore, that they would never more reduce to slavery those whom the tempests might cast upon their shores; never to sacrifice, in future, any one innocent man, and to offer to *Mars* only the blood of the criminal. *Tor Tir*, in a rage, endeavored, in vain, to oppose this law: retired, menacing the king, and all the Gauls, with the approaching vengeance of the gods.

Nevertheless, the king, accompanied by my friend, conducted me, amidst the acclamations of the people, into his city, which was situated in the neighboring island. Till the moment of our arrival in this island, I had been so much discomposed, that I was incapable of a single rational reflection. Every species of new representation of my misfortunes contracted my heart, and obscured my understanding. But as soon as I recovered the use of my reasoning powers, and began to reflect on the extreme danger which I had just escaped, I fainted away. Oh, how weak is man in a paroxysm of joy! He is strong only to encounter woe. *Cephas* brought me to myself,

after the manner of the Gauls, by shaking about my head, and blowing on my face.

When I had recovered my senses, he took my hands in his, and said to me, "Oh, my friend, how many tears you have cost me! When the waves of the ocean, which overset our vessel, had separated us, I found myself cast, I know not how, upon the right hand bank of the Seine. My first care was to seek for you. I kindled fires upon the shore; I called you by name; I employed several of my compatriots, who had gathered together on hearing my cries, to reconnoitre in their boats the banks of the river, to see if they could not find you: All our researches were ineffectual. The day re-appeared, and presented to my view our vessel overturned, and her keel in the air, close to the shore where I was. It never occurred to my thoughts that you might have landed on the opposite shore, in my own country, Belgium. It was not till the third day, that, believing you had perished, I resolved to pass over to it, to visit my relations. The greatest part of them had paid the debt of Nature, during my absence: Those who remained overwhelmed me with kindness; but not even a brother can compensate for the loss of a friend. I returned almost immediately to the other side of the river. There they unloaded our unfortunate vessel, of which nothing had been lost but the

men. I sought your body along the sea shore, and I repeated my demand of it, evening, morning, and in the middle of the night, from the nymphs of the ocean, that I might rear you a monument near to that of *Heva*. I should have passed all my life, I believe, in these vain researches, had not the king, who reigns on the banks of this river, informed that a Phenician vessel was wrecked on his domains, claimed the property which, according to the laws of the Gauls, belonged to him. I collected, accordingly, every thing which we had brought from Egypt, even to the very trees, which had not been damaged by the water; and I presented myself, with these wretched fragments, before that prince. Let us bless, then, the providence of the gods, which has united us again, and which has rendered your misfortunes more useful to my country than even your presents. If you had not made shipwreck on our coasts, the barbarous custom of condemning to slavery those who endure that calamity, would not have been abolished; and, if you had not been condemned to be sacrificed, I should, most probably, never have seen you more, and the blood of the innocent would still have smoked upon the altars of the god of war."

Section X.

Bardus.

THUS spake *Cephas*. As for the king, he omitted nothing which he thought would tend to make me lose the recollection of my misfortunes. He was called *Bardus*. He was already considerably advanced in years, and he wore, according to the custom of the people, his beard and hair very long. His palace was built of the trunks of firs, laid in rows one upon another. It had no other door, except large bullocks' hides, which close up the apertures. No person, was there on guard, for he had nothing to fear from his subjects; but he had employed all his skill and industry, to fortify his city against enemies from without. He had surrounded it with walls, formed of the trunks of trees, intermixed with sods of turf, with towers of stone at the angles, and at the gates. Sentinels were stationed on the top of these towers, who watched day and night. King *Bardus* had received this island from the nymph *Lutetia*, his mother, and it bore her name. It was, at first, covered with nothing but trees, and *Bardus* had not a single subject. He employed himself in twisting, upon the banks

of the island, ropes of the bark of the lime tree, and in hollowing alders to make boats. He sold these productions of his own hands to the mariners who sailed up or down the Seine. While he worked, he sung the advantages of industry and of commerce, which unite together all mankind. The boatmen frequently stopped to listen to his songs. They were repeated, and spread throughout all the Gauls, among whom they were known under the name of the verses of the Bards. Soon after, a great number of people came to establish themselves in this island, in order to hear him sing, and live in greater security. His riches accumulated with his subjects. The island was covered with habitations, the neighboring forests were cleared, and, in a short time numerous flocks covered both the adjacent shores. It was in this manner that the good king formed an empire without violence. But, while as yet, his island was not surrounded by walls, and while he was already planning to make it the centre of commerce for all the nations of Gaul, war was on the point of exterminating all its inhabitants.

One day, a great number of warriors, who were sailing up the Seine, in canoes made of the bark of the elm, disembarked upon its northern shore, directly opposite to *Lutetia*. They were under the command of the Iarle *Carnut*, third son

of *Tendal*, prince of the north. *Carnut* was on his return from laying waste all the coasts of the Hypoborean sea, over which he had spread horror and devastation. He was secretly favored in Gaul by the Druids, who, like all weak men, take the side of those who have rendered themselves formidable. As soon as *Carnut* had landed, he went in search of king *Bardus*, and said to him, "let us fight, thou and I, at the head of our warriors: the weakest shall obey the strongest; for it is the first law of Nature, that every thing should yield to force." King *Bardus* replied, "Oh, *Carnut!* if the point in dispute were the hazarding of my own life, for the defence of my people, I would, without hesitation, expose it. But I will not expose the lives of my people, were it even to save my own. It is goodness, and not force, which ought to be the choice of kings. It is goodness only, which governs the world, and it employs, for that purpose, intelligence and strength, which are subordinate to it, as are all the other powers of the universe. Valiant son of *Tendal*, since thou wishest to govern me, let us try whether of the two, you or I, is the most capable of doing them good. Behold these poor Gauls entirely naked. Without making offensive comparisons, I have several times clothed and fed them, even to the denying myself clothes

and food. Let us see what provisions thou wilt make for their wants."

Carnut accepted the challenge. It was now autumn. He went to the chace with his warriors; he killed a great number of birds, stags, elks, and wild boars. He afterwards, with the flesh of these animals, gave a great feast to the inhabitants of *Lutetia*, and clothed in their skins those who were naked. King *Bardus* said to him, " Son of *Tendal*, thou art a mighty huntsman: Thou wilt be able to support the people, during the hunting season; but in spring, and during summer time, they will perish with hunger. For my part, with my corn, the fleeces of my sheep, and the milk of my flocks, I can maintain them throughout the whole year."

Carnut made no reply; but he remained encamped with his warriors upon the banks of the river, and refused to withdraw.

Bardus, perceiving his obstinacy, went to seek him in his turn, and proposed a second challenge to him: " Valor," said he, " is the quality of a warlike chief, but patience is still more necessary to kings. Since thou wishest to reign, let us try which of us can carry this ponderous log the longest." It was the trunk of an oak of thirty years old. *Carnut* took it on his back, but soon losing patience, hastily threw it down again. *Bardus* laid it across his shoulders, and bore it without

moving, till after sunset, and even till the night was far advanced.

Nevertheless, *Carnut* and his warriors would not depart. They thus passed the whole winter, employed in hunting. The spring returned, and they threatened to destroy a rising city, which refused to do them homage: and they became still greater objects of terror, as they began to be in total want of food. *Bardus* did not know how to rid himself of them, for, they were the most powerful. In vain did he consult the most aged of his people; no one could give him any advice. At last, he laid his distress before his mother *Lutetia*, who was now very old, but who still possessed an excellent understanding.

Lutetia said to him, "my son you are acquainted with a great number of ancient and curious histories, which I taught you, in your infancy; you excel in singing: challenge the son of *Tendal* to a competition in a song with you."

Bardus went, and found out *Carnut*, and said to him, son of *Tendal*, it is not sufficient for a king to maintain his subjects, and to be firm and constant in his labors: He ought to know, likewise how to banish from their minds those miseries of opinion which renders them unhappy; for, it is opinion which exercises influence over mankind, and renders them good or bad. Let us see, whether of the two, thou or I, can exert the

greatest power over their minds. It was not by fighting merely that *Hercules* attracted followers in Gaul, but by divine songs which flowed from his mouth like chains of gold, charmed the ears of those who listened, and constrained them to follow him."

Carnut with joy, accepted this third challenge. He sung the combats of the gods of the north on the icy mountains; the tempests of *Niorder* upon the seas; the tricks of *Vidar* in the air; the ravages of *Thor* on the earth; and the empire of *Hœder* in the dark regions of hell. To these he added the rehearsal of his own victories, and his tremendous strains transfused the emotions of fury into the heart of his warriors, who were on tiptoe to spread universal destruction.

As to king *Bardus*, the following were his milder strains:

"I sing the dawn of the morning, the earliest rays of *Aurora*, which have arisen on the Gauls, the empire of *Pluto*; the blessings of *Ceres*, and the misfortune of the infant *Loïs*. Listen to my songs, ye spirits of the rivers, and repeat them to the spirits of the azure mountains.

"*Ceres* came from seeking her daughter *Proserpine* over the face of the whole earth. She was on her return to Sicily, where grateful myriads adored her. She traversed the savage Gauls, their trackless mountains, their desert

valleys, and their gloomy forests, when she found her progress stopped by the waters of Seine, her own nymph, transformed into a river.

" On the opposite bank of the Seine, there happened at that time to be a beautiful boy, with flaxen hair, named *Loïs*, bathing himself in the stream. He took delight to swim in the transparent waters, and to run about naked on the solitary verdant downs. The moment that he perceived a female, he flew to hide himself amidst a tuft of reeds.

" My lovely child!" cried *Ceres* to him with a sigh; " come to me, my lovely child!" On hearing the voice of a woman in distress, *Loïs* left his retreat among the reeds. He puts on with blushes his robe of lamb's skin, which was suspended on a willow. He crosses the Seine on a bank of sand, and presenting his hand to *Ceres*, shews her a path through the midst of the waters.

" *Ceres* having passed the river, gives the boy *Loïs* a cake, a sheaf of corn, and a kiss; she then informs him how bread was made from the corn, and how corn grows in the fields. Thanks, beauteous stranger, returned *Loïs*; I will carry to my mother thy lessons, and thy welcome presents.

" The mother of *Loïs* divides with her child and husband the cake and the kiss. The enraptured father cultivates a field, and sows the grain.

By and by the earth is clothed with a golden harvest, and a report is diffused over the Gauls, that a goddess had presented a celestial plant to their fortunate inhabitants.

" Near to that place lived a Druid. He was entrusted with the inspection of the forests. He measured out to the Gauls, for food, beech mast, and acorns from the oak. When he beheld a field cultivated, and a rich harvest: what becomes of my power, says he, if men learn to live on corn?

" He calls *Loïs*. My pretty little friend, says he to him, where wert thou when thou beheldest the stranger, who gave thee the fine ears of corn. *Loïs*, apprehending no evil, conducts him to the banks of the Seine. I was, says he, under that silver leaved willow; I was running about over those snowy daisies: I flew to hide myself under these reeds, because I was naked. The treacherous Druid smiled: He seizes *Loïs* and plunges him into the depth of the stream.

The mother of *Loïs* saw her beloved child no more. She wanders through the woods, calling aloud, *Loïs!* Where art thou? my darling child, *Loïs!* The echoes alone repeat, *Loïs*, my darling child, *Loïs!* She runs like one distracted along the banks of the Seine. She perceives something white by the edge of the water: He cannot be far off, said she; there are his beloved

flowers, there are his snowy daisies. Alas! it was *Loïs*, her darling child, *Loïs!*

" She weeps, she groans, she sighs; she takes up in her trembling arms the clay cold body of *Loïs;* she fondly tries to reanimate him in her bosom; but the heart of the mother has no longer the power of communicating warmth to the body of the son: and the clay cold body of the son is already freezing the heart of a mother: She is on the point of expiring. The Druid, mounted on an adjoining rock, exults in his vengeance.

The gods do not always appear at the cry of the miserable; but the voice of a forlorn mother attracted the attention of *Ceres.* The goddess appeared. *Loïs*, says she, be thou the most beautiful flower of the Gauls. Immediately the pale cheeks of *Loïs* expanded into a calix more white than the snow: His flaxen hairs were transformed into filaments of gold, the sweetest of perfumes exhales from it. Its limber stem rises toward heaven, but its head still droops on the banks of the river which he loved. *Loïs* is changed into a lily.

" The priest of *Pluto* beholds this prodigy unmoved. He raises to the superior gods, an inflamed countenance, and eyes sparkling with rage. He blasphemes, he threatens *Ceres*: he

was going to assault her with an impious hand; when she cries to him aloud: gloomy and cruel tyrant, remain.

"At the voice of the goddess, he becomes immoveable. But the rock feels the powerful command; it opens into a cleft; the legs of the Druid sink into it; his visage, bearded all over, and empurpled with rage, rises toward heaven in divergent crimson radiations, and the garment which covered his murderous arms, is bristled into prickles. The Druid is transformed into a thistle.

"Thou, said the goddess of the harvests, who wouldst persevere in feeding men like beasts, become thyself food for animals. Continue to be the enemy of the harvests after thy death, as thou wert during thy life. As for thee, beautiful flower of *Loïs*, be thou the ornament of the Seine, and may thy victorious flower, in the hand of her kings, one day prevail triumphantly over the mistletoe of the Druids.

"Gallant followers of *Carnut*, come and dwell in my city. The flower of *Loïs* perfumes my gardens; the virgins, night and day, chaunt his adventure in my plains. Every one there engages in easy and cheerful labor; and my granaries beloved by Ceres, overflow with piles of grain."

"Scarcely had *Bardus* finished his song, when the warriors of the north, who were perishing

with hunger, abandoned the son of *Tendal*, and fixed their residence in *Lutetia*. This good king frequently said to me, "Ah! why have I not here some illustrious bard of Greece or of Egypt, to polish the minds of my subjects? Nothing tends so much to humanize the heart, as the melody of sweet songs. With the capacity of composing fine verses and ingenious fictions, there is no need of a sceptre to maintain authority."

He carried *Cephas* and me to visit the spot where he had planted the trees and the grains recovered from our shipwreck. It was on the declivity of a hill exposed to the south. I was transported with delight, when I saw the trees which we had imported, replenished with juices and vigor. I first distinguished the quince tree of Crete, from its cottony and fragrant fruit; the walnut tree of *Jupiter*, of a glossy green; the filbert; the fig tree; the poplar; the pear tree of Mount Ida, with its pyramidical fruit. All these trees were from the island of Crete. There were besides the vines of Thasos, and the young chesnut treet of the island of Sardinia. I saw a vast country within the compass of a small garden. Among those plants appeared some which were my compatriots, such as the hemp and the flax. These were the vegetables which pleased the king most, because of their utility. He had admired the stuffs into which they

are manufactured in Egypt, more durable and more pliant than the skins in which most of the Gauls are habited. The king took delight in watering those plants with his own hand, and in clearing them of weeds. Already the hemp, of a beautiful green, carried all its heads equal to the stature of a man, and the flax, in blossom, clothed the ground with a shade of azure.

Section XI.

The Britons.

While *Cephas* and I were inwardly exulting in the reflection of having done good, information was received that the Britons, elated with their recent success, not content to dispute with the Gauls the empire of the sea which separates them, were preparing to attack them by land, and to sail up the Seine, with an intention to carry steel and flame into the very bosom of the country. They had taken their departure in boats innumerable, from a promontory of their island, separated from the continent by only a narrow strait. They coasted along the shore of the Gauls, and were ready to enter the Seine, the dangers of which they knew how to avoid, by running into the creeks, which are sheltered from the rage of *Neptune*. The intended inva-

sion of the Britons was noised abroad all over the Gauls, from the moment that they began to put it into execution; for the Gauls kindle fires on the mountains, and by the number of these fires, and the thickness of their smoke, convey intelligence much more promptly than by the flight of a bird.

On receiving news that the Britons had embarked, the confederated troops of the Gauls began to march to defend the mouth of the Seine. They were ranged under the standards of their several chieftains: These consisted of the skins of the wolf, the bear, the vulture, the eagle, or of some other mischievous animal, suspended at the extremity of a long pole. That of king *Bardus*, and of his island, presented the figure of a ship, the symbol of commerce. *Cephas* and I accompanied the king on this expedition. In a few days, all the united force of the Gauls was collected on the shore of the sea.

Three opinions were started, respecting the mode of defence. The first was, to drive piles along the coast to prevent the debarkation of the Britons; a plan of easy execution, considering that our numbers were inconceivable, and the forests at hand. The second was, to give them battle the moment that they landed. The third, not to expose the troops to the open attack of the advancing enemy, but to assault them when land-

ed, and after they were entangled in the woods and valleys. No one of these opinions were followed up; for discord prevailed among the chieftains of Gaul. Every one was for commanding, while no one was disposed to obey. While they were wasting time in deliberation, the enemy appeared and disembarked while we were settling the arrangement of our plan.

But for *Cephas* we had been undone. Before the arrival of the Britons, he had advised king *Bardus* to divide his force into two, composed of the inhabitants of *Lutetia*, to place himself in ambush, with the better part, in the woods which covered the opposite side of the Mountain of Heva, while *Cephas* himself should engage the enemy with the other party, joined to the rest of the Gauls. I entreated *Cephas* to detach from his division the young soldiers, who panted like myself to come to close action, and to entrust me with the command. I have no fear of danger, said I. Through all the proofs which the priests of Thebes prescribe to the initiated, I passed, and knew not what fear was. *Cephas* hesitated a few moments. At last he committed the young men of his division to my charge, recommending to them, as well as to me, not to separate too far from the main body.

The enemy, meanwhile, had made good their landing. At sight of this, many of the Gauls

advanced to attack them, rending the air with loud cries; but as they charged in small parties, they were easily repulsed; and it would have been impossible to rally a single man of them, had not our rear afforded them an opportunity of recovering from their confusion. We presently perceived the Britons in full march to attack us. The youthful band which I commanded was instantly in motion, and advanced toward the Britons, unconcerned whether we were supported by the rest of the Gallic force or not. When we got within bow shot, we saw that the enemy formed only one single column, long, broad, and closely embattled, advancing slowly upon us, while their barks were forcing their way up the river to get upon our rear. I was staggered, I confess, at sight of that multitude of half naked barbarians, painted with red and blue, marching along in profound silence, and with the most perfect order. But when all at once there issued, from their noiseless phalanx, clouds of darts, of arrows, of pebbles, and leaden balls, which brought down many of us, piercing some through and through, my surviving companions betook themselves to flight. I myself was going to forget that it was my duty to set them an example of resolution, when I beheld *Cephas* by my side; he was followed by the whole army.—"Let us invoke *Hercules*," cried he, "and

advance to the charge." The presence of my friend reanimated all my courage. I resumed my station, and we made the attack with our pikes levelled. The first enemy whom I encountered, was a native of the Hebrides, a man of gigantic stature. The aspect of his arms inspired horror: His head and shoulders were clad in the skin of a prickly thornback; he wore round his neck a collar of human jaw bones, and he bore for a lance, the trunk of a young fir, armed with the tooth of a whale. "What demandest thou of *Hercules?*" said he to me; "here he is to attend thee." At the same time, he aimed at me a stroke of his enormous lance, with so much fury, that if it had hit the mark, I must have been nailed by it to the ground, which it penetrated to a great depth. While he was struggling to disengage it. I pierced him through the throat with the spear which was in my hand: There immediately issued from the wound a stream of black and thick blood; and down fell the stately Briton, biting the ground, and blaspheming the gods.

Meanwhile our troops, collected into one firm body, were closely engaged with the column of the enemy. Clubs clashed with clubs, buckler pressed on buckler, lance crossed lance. Thus two fierce bulls dispute the empire of the meadows: Their horns entwine; their foreheads rat-

tle against each other; bellowing, they press in opposite directions; and whether they gain or lose ground, neither separates from his rival. Thus we maintained the combat, body to body. Nevertheless, that column, which exceeded us in numbers, was bearing us down with superior force, when king *Bardus* came up, and assaulted their rear with his troops, who came into action with a shout which rended the air. Upon this a panic terror seized these barbarians, who had been flushed with the hope of surrounding us, but were themselves surrounded. They deserted their ranks in confusion, and fled toward the shore of the sea, in the hope of regaining their barks, which had now considerably advanced up the stream. A dreadful carnage ensued, and many prisoners were taken.

The combat being finished, I said to *Cephas*, The Gauls are indebted for their victory, to the counsel which you gave the king; for my part, to you I owe the preservation of my honor. I had solicited a post which I knew not how to fill; I ought to have exhibited an example of valor to those who were under my command; but was incapable of doing it, when your presence rekindled a sense of duty. I imagined that the initiations of Egypt had fortified me against all apprehension of danger; but it is easy to be brave

amidst conflicts, out of which you are sure of escaping. *Cephas* thus replied: "O *Amasis!* there is more fortitude in confessing a fault, than there is weakness in committing it. It is *Hercules* who has given us the victory; but, after him, it was surprise which robbed our enemies of courage, and which had shaken your's. Military valor, like every other virtue, is to be acquired only by exercise. We ought, on all occasions, to be diffident of ourselves. In vain do we trust to our own experience; in the aid of heaven alone our confidence should be placed. While we are buckling on our armor to defend us before, fortune strikes at us from behind. Confidence in the gods alone, is a defence on every side."

To *Hercules* we consecrated part of the spoils taken from the Britons. The Druids advised to burn the prisoners, because the Britons were in use to treat those whom they took in battle from the Gauls in this manner. But I presented myself in the assembly of the Gauls, and thus addressed them: "O ye nations! you see from my example, whether the gods delight in human sacrifices. They have deposited the victory in your generous hands: will you stain them with the blood of the miserable? Has there not enough of blood been shed in the rage of battle? Can you now spill it, without passion, and in the joy of triumph? Your enemies immolate their pri-

soners. Surpass them in generosity, as you surpass them in courage." The Iarles, and all the warriors, received this advice with loud applause: And it was decreed that the prisoners of war should be disarmed, and reduced to slavery.

I was the cause, therefore, of the abolition of the law which condemned them to the flames. I likewise proved the occasion of abrogating the custom of sacrificing innocents to *Mars*, and of reducing the shipwrecked to servitude. Thus was I thrice useful to mankind in the Gauls; once by my success, and twice by my misfortunes: So true it is that the gods can, when they please, bring good out of evil.

Section XII.

The Kings' Garden.

We returned to *Lutetia*, loaded with the acclamations and applause of the people. The first anxiety expressed by the king, on his arrival, was to carry us with him to visit his garden. The greatest part of our trees were in great forwardness. He admired, first, how Nature had preserved their fruits from the attack of the birds. The chesnut, still in a milky state, was covered with leather, and with a prickly shell. The tender walnut was protected by a hard shell, and a

bitter outward case. The soft fruits were defended, previous to their maturity, by their roughness, their acidity, or their verdure. Those which were ripe invited the hand to gather them. The gold colored apricot, the velvet peach, and the cottony quince, exhaled the sweetest of perfumes. The boughs of the plum tree were covered with violet colored fruits, besprinkled with a white powder. The grapes, already of a vermillion hue, hung in clusters from the vine; and over the broad leaves of the fig tree, the half opened fig distilled its juice in drops of honey and crystal. "It is easy to see," said the king, "that these fruits are presents sent from heaven. They are not, like the seeds of our forest trees, at a height which we cannot reach. They present themselves to the hand. Their smiling colors allure the eye, their sweet perfumes the organs of smelling, and they seem formed for the mouth, from their size and roundness." But when that good king had caught the flavor of them by his palate, "O real gift of *Jupiter*!" exclaimed he, "no aliment prepared by human skill is once to be compared to them! They excel in sweetness the honey and the cream. O, my dear friends, my much respected guests, you have bestowed on me a present of much higher value than my kingdom! You have introduced into savage Gaul a portion of delicious Egypt.

I prefer a single one of these trees to all the mines of tin which render the Britons so rich and so haughty."

He sent for the principal inhabitants of the city, and made each of them taste these wondrous fruits. He recommended to them carefully to preserve the seeds, and to put them in the ground at the proper season. From the joy expressed by this excellent Prince, and by his people, I was made sensible that man's highest delight consists in doing good to his fellow creatures.

Section XIII.

The Arts of Egypt.

CEPHAS said to me, "now is the time to shew to my compatriots the use of the Arts of Egypt. I have saved from the shipwrecked vessel the greatest part of our machines; but hitherto they have remained unemployed: nay, I durst not so much as look at them; for they reminded me too affectingly of the loss of you. The moment is come for turning them to account. Those fields of corn are now ripe; that hemp, and those flaxes, are hastening to be so.

Having gathered those plants, we taught the king, and his people, the use of mills, for reducing corn to flour, and the different processes of

preparing dough, in order to make bread of it. Previous to our arrival, the Gauls pealed wheat, oats, and barley, by pounding them with wooden mallets in the trunk of a tree hollowed out, and satisfied themselves with boiling the grain in this state for food. We afterwards shewed them the method of steeping hemp in water, to separate the filaments from the straw, of drying it, of beating it, of dressing it, of spinning it, and of twisting several threads together, for the purpose of making cordage. We made them observe how those cords, by their strength and pliancy, are adapted to act as the nerves of every species of machinery. We taught them the art of distending the threads of flax on looms, to weave into cloth by means of the shuttle; and how these gentle and useful labors might employ the young people, innocently and agreeably, during the long nights of winter.

We instructed them in the use of the auger, of the gimblet, of the plane, and of the saw, invented by the ingenious *Dedalus;* as these tools furnish man with additional hands, and fashion to his use a multitude of trees, the timber of which would have gone to waste in the forest. We taught them to extract from their knotty trunk powerful screws, and ponderous presses, fit for squeezing out the juice of an infinite number of fruits, and for forcing oil out of the hardest

nuts. They did not gather many grapes from our vines; but we inspired them with an ardent desire of multiplying the slips, not only by the excellence of the fruit from the bough, but by letting them taste the wines of Crete, and of the Isle of Thasos, which we had preserved in urns.

After having disclosed to them the use of an infinity of benefits, which Nature has placed on the face of the earth, obvious to the eye of man, we aided them in discovering those which she has deposited under their feet; how water may be found in places the most remote from rivers, by means of wells invented by *Danäus*; in what manner metals are discovered, though buried in the bowels of the earth; how, after having them melted into bars, they could be hammered upon the anvil, to prepare them for being divided into tablets and plates; in what manner, by a process the most simple, clay may be fashioned on the potter's wheel into figures and vases of every form. We surprised them much more, by shewing them bottles of glass, made with sand and flint. They were delighted to ecstasy, to see the liquor which they contained manifest to the eye, but secured from the touch.

But when we read to them the books of *Mercurius Trismegistus*, which treat of the liberal arts, and of the natural sciences, then it was that their admiration exceeded all bounds. At first

they were incapable of comprehending how speech could issue from a dumb book, and how the thoughts of the earliest Egyptians could possibly have been transmitted to them, on the frail leaves of the papyrus. When they afterwards heard the recital of our discoveries; when they saw the prodigies effected by the mechanical powers, which move the heaviest bodies by means of small levers, and those of geometry, which can measure distances the most inaccessible, they became perfectly transported. The wonders of chymistry and of magic, and the various phenomena of physics, hurried them from rapture to rapture. But when we predicted to them an eclipse of the moon, which, prior to our arrival, they considered as an accidental failure of that planet, and when they saw, at the very moment which we had indicated, the orb of night become dark in the midst of a serene sky, they fell at our feet, saying, "Assuredly ye are gods."

Section XIV.

Omfi.

Omfi, that young Druid who had discovered so much sensibility to my afflictions, attended all our lessons of instruction. "From your intelligence," said he to us, "and from

your beneficence, I am tempted to believe you some of the superior gods; but from the ills which you have endured, I perceive that you are only men like ourselves. You must, undoubtedly, have contrived the means of climbing up into heaven; or the inhabitants of the celestial regions must have descended into highly favored Egypt, to communicate to you so many benefits, and so much illumination. Your arts and sciences surpass our understanding, and can be the effects only of a power divine. You are the darling children of the superior gods: As for us, we are abandoned of *Jupiter* to the infernal deities. Our country is covered with unproductive forests, inhabited by maleficent genii, who disseminate through the whole of our existence, discord, civil broils, terrors, ignorance, and mischievous opinions. Our lot is a thousand times more deplorable than that of the beasts, which, clothed, lodged, and fed by the hand of Nature, follow undeviatingly their instinct, without being tormented by the fears of hell."

"The gods," replied *Cephas*, "have not been unjust to any country, nor to any one individual. Every country possesses blessings peculiar to itself, and which serve to keep up a communication among all nations, by a reciprocal interchange of commodities. Gaul contains the

metals which Egypt wants; her forests are more beautiful; her cattle yield milk in greater abundance: and, the fleeces of her sheep are greater in quantity, and give a finer wool. But wherescever the habitation of man is fixed, his portion is always far superior to that of the beasts, because he is endowed with a reason which expands in proportion to the obstacles which it surmounts, and because he alone of animals is capable of applying to his own use means which nothing can resist, such as fire. Thus, *Jupiter* has bestowed upon him empire over the earth, by illuminating his reason with the intelligence of Nature herself, and by confiding to him alone that element which is her prime moving principle."

Cephas afterwards talked to *Omfi*, and to the Gauls, of the rewards prepared, in the world to come, for virtue and benificence, and the punishments laid up in store for vice and tyranny; of the metempsychosis, and the other mysteries of the religion of Egypt, as far as a stranger is permitted to be instructed in them. The Gauls, consoled by his discourse, and enriched by our presents, called us their benefactors, their fathers, the true interpreters of the gods. King *Bardus* thus addressed us: "I will adore *Jupiter* alone. As *Jupiter* loves mankind, he must afford particular protection to kings, to whom the felicity of whole nations is entrusted. I will likewise pay

homage to *Isis*, who has brought down his benefits to the earth, that she may present the vows of my people to the sovereign of the gods." At the same time, he gave orders to rear a temple to *Isis*, at some distance from the city, in the midst of the forest; to erect her statue in it, with the infant *Orus* in her arms, such as we had brought it with us in our vessel; to honor her with all the sacred ceremonies of Egypt; and that her priestesses, clothed in linen, should night and day adore her with songs, and by a life of purity, which exalts man to the gods.

He afterwards expressed a wish to be instructed in reading and tracing the Ionic characters. He was so struck, with the utility of letters, that, transported with delight, he sung the following strains.

" Behold the magic characters which have power to recal the dead from the dark recesses of the tomb. They inform us what our fathers thought a thousand years ago; and a thousand years hence, they will be instructing our children what we think at this day. There is no arrow that flies so far, neither is there any lance so strong. They can reach a man though entrenched on the summit of a mountain; they penetrate into the head though fortified with the helmet, and force their way to the heart in defiance of the cuirass. They calm seditions, they administer

sage counsels, they conciliate affection, they comfort, they strengthen; but in the hands of a wicked man, they produce quite an opposite effect."

Section XV.

Gotha.

"My son," said this good king to me, one day, "Are the moons of thy country more beautiful than ours? Hast thou remaining in Egypt any object of regret? Thou hast brought to us from thence all the best of human blessings: Plants, arts and sciences. All Egypt ought to be here for thy sake. Continue to live with us. After my death thou shalt reign over the Gauls. I have no child, except an only daughter named Gotha: To thee I will give her in marriage. A whole people, believe me, is of more value than one family, and a good wife than the land of one's nativity. Gotha's residence is in that island below, the trees of which are visible from this spot; for it is proper that a young woman should be brought up remote from men, and especially at a distance from the courts of kings."

The desire of making a nation happy suspended in me the love of country. I consulted *Cephas* on the subject, who adopted the views of the king. I besought that prince, therefore, to permit me

to be conducted to the place of his daughter's habitation, that, in conformity to the custom of the Egyptians, I might endeavor to render myself agreeable to the person who was one day to be the partner of my pains and of my pleasures. The king gave orders to an aged female, who came every day to the palace for provisions for Gotha, to conduct me to her presence. The ancient lady made me embark with her in a barge loaded with necessaries: and committing ourselves to the course of the stream, we landed, in a very little while, on the island where the daughter of king *Bardus* resided. This island was called the Isle of Swans, because the birds of that name resorted thither in the spring, to make their nests among the reeds that surround its shores, and which, at all seasons, fed on the *anserina potentilla* produced there in great abundance. On our landing, we perceived the princess seated under a clump of alder trees, in the midst of a down, yellowed all over with the flowers of the anserina. She was encompassed with swans, which she called to her, by scattering among them the grains of oats. Though she was under the shade of the trees, she surpassed those birds in whiteness, from the purity of her complexion, and the fairness of her ermine robe. Her hair was of the most beautiful black: and she wore it encircled, as well as her robe, with a red colored rib-

band. Two women, who attended her at some distance, advanced to meet us. The one tied our barge to the branches of a willow; and the other, taking me by the hand, presented me to her mistress. The young princess made me sit down by her on the grass; after which she invited me to partake with her of some flour of millet boiled, of a duck roasted on the bark of the birch tree with goat milk in the horn of an elk. She then waited, in modest silence, till I should explain to her the intention of my visit.

Having tasted, in compliance with the custom, the dishes presented to me, I addressed her thus: "O beautiful *Gotha*, I aspire to the honor of being son-in-law to the king, your father, and I visit you with his consent, to know whether my suit will be agreeable to you?"

The daughter of king *Bardus*, with downcast looks, replied, "O stranger! I have been demanded in marriage by many Iarles, who are, from day to day, making my father magnificent presents, in the hope of obtaining my hand; but no one of them possesses my affection. Fighting is the only art which they understand. As for thee, I believe, If thou becomest my husband, thou wilt make my happiness thy study, since thou already hast devoted thyself to the happiness of my people. Thou wilt instruct me in the arts of Egypt, and I shall become like unto the

good *Isis* of thy country, whose name is mentioned with such profound respect all over Gaul."

After she had thus spoken, she attentively considered the different parts of my habit, admired the fineness of their texture, and made her women examine them, who lifted up their eyes to heaven in astonishment. After a short pause, looking at me, she thus proceeded: "Though thou comest from a country replenished with every species of wealth, and every production of ingenuity, do not imagine that I am in want of any thing, and that I myself am destitute of intelligence. My father has trained me up in the love of labor, and he causes me to live in the greatest abundance of all things."

At the same time she introduced me into her palace, where twenty of her women were employed in plucking river fowls, to make, for her, ornaments and robes of their plumage. She shewed me baskets and mats of very delicate rushes, woven by her own hand; vessels of fine pewter in great quantities; a hundred skins of wolves, martens, and foxes, with twenty bear skins. "All this treasure," said she to me, "shall be thine, if thou espousest me; but upon these conditions, that thou takest no other wife but me; that thou shalt not oblige me to labor the ground, nor to go in quest of the skins of the deer and of the buffaloes which thou mayest kill

in hunting in the forests ; for such tasks are imposed by husbands on their wives, in these countries, but which I do not at all like ; and that, if at length, thou becomest tired of living with me, thou shalt replace me in this isle, whither thou hast come to woo me, and where my pleasure consists in feeding the swans, and in chanting the praises of *Seine*, the nymphs of *Ceres*."

I smiled within myself at the simplicity of the daughter of king *Bardus*, and at sight of what she denominated treasure ; but as the true riches of a wife consist in the love of industry, candor, frankness, gentlenesss, and that there is no dowry once to be compared to these virtues, I replied to her " O beautiful *Gotha*, marriage among the Egyptians is a legal union, a mutual interchange of possessions and of sorrows ; thou shalt be dear to me as the better half of myself." I then made her a present of a skein of flax, which grew, and was prepared in the gardens of the king, her father. She received it with delight, and said to me, " My friend, I will spin this flax, and have it weaved into a robe for the day of my espousals." She presented me, in her turn, with this little dog which you see, so covered over with hair, that his eyes are scarcely descernible. She said to me, " The name of this dog is Gallus ; he is descended from a race remarkable for their fidelity. He will follow thee wheresoever thou goest, over the

land, over the snow, and into the water. He will accompany thee in the chace, nay, to the field of battle. He will be to thee, at all seasons, a faithful companion, and a symbol of my affection." As the day was drawing to a close, she reminded me that it was time to retire, desiring me, in future, not to come down along the current of the river, but to travel by land on the banks, till I came opposite to her island, where her women should be in waiting to ferry me over, and thus conceal our mutual felicity from jealous eyes. I took my leave of her, and returned to my home, forming in my mind, as I went on my way, a thousand agreeable projects.

Section XVI.

Torstan.

One day as I was going to visit her, through a path cut out in the forest, in compliance with the advice which she had given me, I met one of the principal Iarles, attended by a great number of his vassals. They were armed as if they had been in a state of war. For my part, I wore no armor, like a man who was at peace with all the world, and whose mind was oc-

cupied only with the reveries of love. The Iarle advanced toward me with a haughty air, and thus accosted me: "what seekest thou in this country of warriors, with these womanish arts of thine? Meanest thou to teach us how to spin flax, and expectest thou to obtain the beauteous *Gotha* as thy recompence? My name is *Torstan*. I was one of the companions of *Carnut*. I have been engaged in twenty two battles by sea, and have come off victorious in thirty single combats. Thrice have I fought with *Vittiking*, that renowned prince of the north. I am going to carry thy hairy scalp, and lay it at the feet of the god *Mars*, from whom thou madest thy escape, and to quaff from thy skull the milk of my flocks."

After an address so brutal, I apprehended that the barbarian was about to assassinate me; but uniting magnanimity to ferociousness, he took off his head piece and cuirass, which were of bull's hide, and presenting to me two naked swords, desired me to take my choice.

It was useless to think of reasoning with a man under the influence of jealousy and madness. I secretly invoked the aid of *Jupiter*, the protector of strangers: and having chosen the shorter, but the lighter of the two swords, though I had scarcely strength to wield it, a dreadful combat ensued, while his vassals surrounded us as witnesses, expecting to see the earth reddened either

with the blood of their chieftain or with that of their guest.

My intention at first was to disarm my enemy, in the view of saving his life, but he did not leave this in my option. Rage transported him beyond all the bounds of prudence. The first blow which he aimed at me, carried off a huge splinter from a neighboring oak. I shunned the blow, by stooping down my head. This movement redoubled his insolence. "Wert thou," exclaimed he, "to stoop down to hell, thou shouldest not escape me." Then, taking his sword in both hands, he fell furiously upon me; but *Jupiter* preserving my senses in complete tranquility, I parried with the back of my sword the stroke with which he was going to fell me to the ground, and presenting to him the point, he violently rushed upon it, and run himself through the breast. Two streams of blood issued at once from the wound and from his mouth; he fell backwards, the sword dropped from his hands, he raised his eyes to heaven, and expired. His vassals immediately encompassed his body, uttering loud and horrid cries. But they suffered me to depart without the least molestation; for generosity is a prominent character in those barbarians. I retired to the city, sadly deploring my victory.

I gave an account of what had happened, to

Cephas and to the king. "Those Iarles," said the king, "give me much uneasiness. They tyrannize over my people. Every profligate in the country, on whom they can lay their hands, they take care to wheedle over, in order to strengthen their party. They sometimes render themselves formidable even to myself. But the Druids are still much more so. No one dares to do any thing here without their consent. Which way shall I go to work to enfeeble those two powers? I imagined that by increasing the influence of the Iarles, I should raise a bulwark to oppose that of the Druids. But the contrary has taken place: The power of the Druids is increased. It appears as if there were an understanding between them, for the purpose of extending their oppression over the people, nay, even over my guests. "O stranger," said he to me, "you have had but too much experience of this!" Then, turning to *Cephas*, "O my friend," added he, "you who in the course of your travels, have acquired the knowledge necessary to the government of mankind, give some instruction, on this subject, to a king, who never was beyond the limits of his own country. Oh! how sensible I am of the benefit which kings might derive from travelling."

"I will unfold to you, O king," replied *Cephas*, "some part of the policy and philosophy of Egypt. One of the fundamental laws of Nature

is, that every thing must be governed by contraries. From contraries the harmony of the universe results. The same thing holds good with respect to that of nations. The power of arms, and that of religion, are at variance in every country. These two powers are necessary to the preservation of the state. When the people are oppressed by their chieftains, they flee for refuge to the priests; and when oppressed by their priests, they seek refuge in the chieftains. The power of the Druids has increased, therefore, with you, by that very increase of the power of the Iarles: for these two powers universally counterbalance each other. If you wish, then, to diminish one of the two, so far from augmenting its counterpoise, as you have done, you ought on the contrary, to reduce it.

"But there is a method still more simple, and more infallible, of diminishing, at once, both the powers which are so offensive to you. It is, to render your people happy; for they will no longer ramble in quest of protection out of yourself, and these two powers will be speedily annihilated, as they are indebted, for the whole of their influence, only to the opinion of that very people. In this you will succeed, by furnishing the Gauls with ample means of subsistence, by the establishment of the arts which sweeten human life, and especially by honoring and encourag-

ing agriculture, which is its main support. While the people thus live in the enjoyment of abundance, the Iarles and the Druids will find themselves in the same state. Whenever these two corps shall have learned to be content with their condition, they will no longer think of disturbing the repose of others; they will no longer have at their disposal that crowd of miserable wretches, half starving with cold and hunger, who, for a morsel of bread, are ever ready to abet the violence of the one, or the superstition of the other. The result of this humane policy will be, that your own power, supported by that of a people whom your exertions are rendering happy, must completely absorb that of the Iarles and of the Druids. In every well regulated monarchy, the power of the king is in the people, and that of the people in the king. You will then reduce your nobility and the priesthood to their natural functions. The Iarles will defend the nation against foreign invasion, and will be no longer oppressors at home: and the Druids will no longer govern the Gauls by terror; but will comfort them, and, by their superior illuminations, and compassionate counsels, will assist them in bearing the ills of life, as the ministers of every religion ought to do.

"By such a policy it is that Egypt has attained a degree of power, and of felicity, which ren-

ders her the centre of the nations, and that the wisdom of her priesthood commands so much respect over the face of the whole earth. Keep this maxim, therefore, constantly in view: That every excess of power, in a religious or a military corps, arises out of the wretchedness of the people, because all power is derived from them. There is no other way of curbing that excess, but by rendering the people happy.

"When once your authority shall be completely established, communicate a share of it to magistrates selected from among persons of the most distinguished goodness. Bend your chief attention to the education of the children of the commonality: But take care not to entrust it to the first adventurer who may be disposed to undertake it, and still less to any one particular corps, such as that of the Druids, the interests of which are always different from those of the state. Consider the education of the children of your people, as the most valuable part of your administration. It alone can form citizens. Without it the best laws are good for nothing.

"While you wait for the means and an opportunity, of laying a solid foundation whereon to rear the fabric of Gallic felicity, oppose some barriers to the ills which they endure. Institute a variety of festivals, to dissipate their thoughts by the charm of music and dancing. Counter-

balance the united influence of the Iarles and Druids, by that of the women. Assist these in emerging out of their domestic slavery. Let them assist at the festive meetings and assemblies, nay, at the religious feasts. Their natural gentleness will gradually soften the ferocity of both manners and religion."

"Your observations," replied the king to *Cephas*, "are replete with truth, and your maxims with wisdom. I mean to profit by them. It is my determination to render this city illustrious for its industry. In the mean while, my people ask for nothing better than to sing and make merry: I myself will compose songs for their use. As for the women, I am fully persuaded that their aid will be of high importance to me. By their means I shall begin the work of rendering my people happy; at least by the influence of manners, if I cannot by that of laws."

While this good king was speaking, we perceived on the opposite bank of the Seine, the body of *Torstan*. It was stripped naked, and appeared on the grass like a hillock of snow. His friends and vassals moved solemnly around it, and, from time to time, rent the air with fearful cries. One of his kindred crossed the river in a boat, and addressed the king in these words: "Blood calls for blood; the Egyptian must be put to death!" The king made no reply to this

person ; but as soon as he had retired, accosted me in these words : " Your defence of yourself was perfectly warrantable and legal ; but were this my personal quarrel, I should be under the necessity of withdrawing from the consequences. If you remain, you will be obliged, by the laws, to fight, one after another, with all the kindred of *Torstan*, who are very numerous, and sooner or later fall you must. On the other hand, if I defend you against them, as I mean to do, this rising city must be involved in your destruction ; for the relations, the friends and the vassals of *Torstan*, will assuredly come and lay siege to it ; and they will be joined by multitudes of Gauls whom the Druids, irritated as they are against you, are already exciting to vengeance. Nevertheless, be confident of this, you will here find men determined not to abandon you, be the danger ever so threatening."

He immediately issued his orders to provide for the security of the city ; and instantly the inhabitants were seen in motion along the ramparts, resolved, to a man, to stand a siege in my defence. Here, they collected a huge pile of flint stones ; there, they planted prodigious cross bows, and long beams, armed with prongs of iron. Meanwhile, we perceived innumerable tribes of men marching along the banks of the Seine, in marti-

al array. They were the friends, the kinsmen, the vassals of *Torstan*, with their slaves, the partisans of the Druids, such as were jealous of the king's establishment, and those who, from levity of mind, affect novelties. Some floated down the river in boats; others crossed the forest in lengthened columns. They took their station as one man on the banks adjoining to *Lutetia*, and their numbers surpassed the powers of reckoning. It was absolutely impossible I ever should escape them. In vain would it have been to make the attempt under favor of the darkness; for as soon as night set in, the besiegers kindled innumerable fires, with which the river was illuminated to the very bottom of its channel.

Reduced to this perplexity, I formed in my own mind a resolution which was well pleasing to *Jupiter*. As I no longer expected any thing good at the hands of men, I resolved to throw myself into the arms of virtue, and to save this infant city, by a voluntary surrender of myself to the enemy. Scarcely had I reposed my confidence in the gods, when they appeared for my deliverance.

Omfi presented himself before us, holding in his hand an oaken bough, on which had grown a sprig of the mistletoe. At sight of this little shrub, which had almost proved so fatal to me, I shuddered with horror; but I was not aware,

that we are frequently indebted for safety to that which menaced us with destruction, as we likewise frequently meet destruction in what promised us safety. " O king !" said *Omfi*, " O *Cephas!* be composed ; I bear in my hand the means of saving your friend. " Young stranger," said he to me, " were all the nations of Gaul combined against thee, armed with this, thou mayest pass through the thickest of their hosts, while not one of thy numerous foes durst so much as look thee in the face. It is a sprig of the mistletoe, which grew on this oaken branch. Permit me to inform you from whence proceeds the power of this plant, equally formidable to the gods and to the men of this country. *Balder*, one day, informed his mother *Friga*, that he had dreamed he was going to die. *Friga* conjured the fire, the metals, the stones, diseases, the water, animals, serpents, that they should not hurt her son ; and the incantations of *Friga* were so powerful, that nothing could resist them. *Balder* mingled, therefore, in the combats of the gods, undaunted amidst showers of arrows. *Loke*, his enemy, was eagerly desirous of discovering the cause of it. He assumed the form of an old woman, and threw himself in the way of *Friga*. Flights of arrows, and showers of massy rock, said he to her, fall upon thy son *Balder*, but hurt him not. I know it well, said *Friga* ; all these things have

pledged unto me their oath. Nothing in Nature has the power of doing him harm. This grace have I obtained of every being possessed of power. Of one little shrub alone I asked it not, because it appeared to me too feeble to excite apprehension. It adhered to the bark of an oak; and scarcely had the advantage of a roof. It lived without earth. The name of it is Mistletein. Thus spake *Friga*. *Loke* went instantly in quest of this little shrub; and mixing in the hosts of the gods, while they were engaged in combat with the invulnerable *Balder*, for battles are their sports, he approached the blind *Hæder*. Wherefore, said he to him, levellest thou not likewise weapons against *Balder?* I am blind, replied *Hæder*, neither am I provided with arms. *Loke* presented to him the mistletoe of the oak, and said to him, *Balder* is just before thee. The blind *Hæder* let fly the fatal shaft: *Balder* falls transfixed and lifeless. Thus the invulnerable son of a goddess was slain by a twig of mistletoe, launched from the hand of one blind. This is the origin of the respect paid in the Gauls to this shrub.

"Compassionate, O stranger! a people governed by terror, because the voice of reason is not heard among them. I flattered myself, on thy arrival, with the hope that thou wert destined to found, and to extend her empire, by introducing

the arts of Egypt: and that I should behold the accomplishment of an ancient oracle universally received among us, by which a destiny the most sublime is assigned to this city; that its temples shall rear their heads above the tops of the forests; that it shall assemble, within its precincts, the men of all nations; that the ignorant shall resort hither for instruction, the miserable for consolation; and that there the gods should communicate themselves to men, as in highly favored Egypt. But, ah, these happy times are still removed to an awful distance."

The king thus addressed *Cephas* and myself: "O my friends, avail yourselves, without a moment's delay, of the succour which *Omfi* brings you." At the same time he gave orders to prepare a barge for us, provided with excellent rowers. He presented us with two ashen half pikes, mounted with steel by his own hand, and two ingots of gold, the first fruits of his commerce. He next employed some of his confidential servants, to conduct us to the territory of the Veneti. "They are," said he to us, "the best navigators of all the Gauls. They will furnish you with the means of returning into your own country, for their vessels traffic up the Mediterranean. They are, besides, a people of singular goodness. As for you, O my friends! your names shall be ever held in honor, all over

the Gauls. *Cephas* and *Amasis* shall be the burden of my songs; and so long as I live, their names shall frequently resound along these shores.

We accordingly took leave of this good king, and of *Omfi*, my deliverer. They accompanied us to the brink of the Seine, dissolved into tears, as we ourselves likewise were. As we passed through the city, crowds of people followed us, exhibiting the tenderest marks of affection. The women carried their infants aloft in their arms, and upon their shoulders, displaying to us, with tears in their eyes, the linen garments in which they were clothed. We bid adieu to king *Bardus* and *Omfi*, who could hardly summon up sufficient resolution to meet the moment of separation. We perceived them, for a long time, on the most elevated pinnacle of the city, waving their hands in token of saying farewel.

Section XVII.

The Altar.

SCARCELY had we put off from the island, when the friends of *Torstan* crowded into boats innumerable, and rushed out to attack us, with tremendous shouts. But at sight of the

hallowed shrub which I carried in my hands, and which I raised into the air, they fell prostrate on the bottom of their barges, as if they had been struck with a power divine; such is the power of superstition over minds enslaved. We, accordingly, passed through the midst of them, without sustaining the sligh test injury.

We forced our way up the river during the course of a day. After this, having gone on shore, we bent our course toward the west, across forests almost impracticable. Their soil was here and there covered with trees, laid low by the hand of Time. It had throughout a carpeting of moss, thick and spongy, into which we sometimes sunk up to the knees. The roads which divide those forests, and which serve as boundaries to different nations of the Gauls, were so little frequented, that trees of considerable size had shot up in the midst of them. The tribes which inhabited them were still more savage than their country. They had no other temples except some thunder-struck yew tree, or an aged oak, in which some Druid had planted an ox head with the horns. When, in the night time, the foliage of those trees were agitated by the winds, and illumined by the light of the moon, they imagined that they saw the spirits and the gods of their forests. Upon this, seized with a religious horror, they prostrated themselves to the ground.

and adored, with trembling, those vain phantoms of their own imagination. Our guides themselves never durst have traversed those awful regions, which religion had rendered formidable in their eyes, had not their confidence been supported much more by the branch of mistletoe with which I was armed, than by all our reasonings.

We did not find, in the course of our progress through the Gauls, any appearance of a rational worship of the DEITY, excepting that one evening, on our arrival at the summit of a snow covered mountain, we perceived there a fire, in the midst of a grove of beech trees and firs. A moss grown rock, hewn out in form of an altar, served as a hearth to it. It was surrounded with large piles of dry wood, and with a large assortment of bear and wolf skins, suspended on the boughs of the neighboring trees. In every other respect, there was not perceptible all around this solitude, through the whole extent of the horizon, any one trace of human habitation. Our guides informed us, that this spot was consecrated to the god who presides over travellers. The word *consecrated* made me shudder. "Let us remove hence," said I to *Cephas*. "Every altar in the Gauls excites a thousand suspicions in my breast. I will henceforward pay homage to the DEITY, only in the temples of

Egypt." *Cephas* replied, "reject every religion which subjects one man to another man in the name of the divinity, were it even in Egypt: but in every place where the good of man is studied, GOD is acceptably worshipped, were it even in Gaul. In every place, the happiness of men constitutes the glory of GOD. For my part, I sacrifice at every altar, where the miseries of the human race are relieved." As he said these words, he prostrated himself, and put up his prayer: He then threw into the fire a log of fir, and some branches of the juniper tree, which perfumed the air, as the sparks with a crackling noise ascended upward. I imitated his example; after which, we went and seated ourselves at the foot of the rock, in a place carpeted over with moss, and sheltered from the north wind; and having covered ourselves with the skins which were suspended on the trees, notwithstanding the severity of the cold, we passed the night in a comfortable degree of warmth. On the return of the morning, our guides informed us, that we had to march all the day long over similar heights, without finding wood, or fire, or habitation. We presented our acknowledgments a second time to providence, for the asylum so seasonably afforded us; we replaced the skins on the trees, with a religious exactness; we threw fresh wood upon

the fire; and before we proceeded on our way, I engraved the following words on the bark of a beech tree:

CEPHAS and AMASIS,

IN THIS PLACE PRESENTED ADORATION

TO

THE DEITY

WHO PRESIDES OVER TRAVELLERS.

We passed successively through the territories of the Carnutes, the Cenomanes, the Diablintes, the Redons, the Curiosolites, the inhabitants of Dariorigum, and, at length, we arrived on the western extremity of Gaul, among the Veneti. The Veneti are the most expert navigators of those seas. They have even founded a colony, which bears their name, at the bottom of the Adriatic Gulf. As soon as they were informed of our being the friends of king *Bardus*, they loaded us with innumerable demonstrations of kindness. They proffered to carry us directly to Egypt, as far as which they have extended their commerce; but as they likewise trade to Greece, *Cephas* said to me, "let us visit Greece; we shall there find frequent opportunities of returning into thy country. The Greeks are the friends of the Egyptians. To Egypt they are indebted for the most illustrious of the founders of

their cities. *Cecrops* it was who gave laws to Athens, and *Inachus* to Argos. At Argos it is that *Agamemnon* reigns, whose renown is diffused over the face of the whole earth. There shall we behold him crowned with glory, in the bosom of his family, and encompassed with kings and heroes. If he is still engaged in the siege of Troy, his ships will easily convey us to thy country. Thou hast seen the most refined state of civilization in Egypt, and the grossest barbarism in the Gauls; thou wilt find in Greece, a politeness and an elegance which will charm thee. Thou wilt thus have had the spectacle of the three periods through which most nations pass. In the first, they are below Nature; they come up to her, in the second; and in the third, they go beyond her."

The views of *Cephas* were too congenial with my passion for glory, to admit of my neglecting an opportunity of forming an acquaintance with men so illustrious as the Greeks, and especially so renowned as *Agamemnon*. I waited with impatience for the return of a season favorable to navigation; for we had reached the Veneti in winter. We passed that season in an incessant round of feasting, conformably to the custom of those nations. As soon as spring retnrned, we prepared to embark for Argos. Before we took our departure from the Gauls, we learned that

our disappearing from Lutetia had restored tranquility to the states of king *Bardus*; but that his daughter, the beautiful *Gotha*, had retired, with her women, into the temple of *Isis*, to whom she had consecrated herself; and that, night and day, she made the forest resound with her melodious songs.

I sensibly felt the mortification of this excellent prince, who lost his daughter from the very circumstance of our arrival in his country, an event which was one day to crown him with immortal honor; and I myself experienced the truth of the ancient maxim, that public consideration is to be acquired only at the expence of domestic felicity.

After a navigation somewhat tedious, we passed the straits of *Hercules*. I felt myself transported with joy at the sight of the sky of Africa, which recalled to my thoughts the climate of my native country. We descried the lofty mountains of Mauritania, Abila, situated in the mouth of the strait of *Hercules*, and those which are called the seven brothers, because they are of the same elevation. They are covered from their summit, down to the very water's edge, with palm trees loaded with dates. We discovered the fertile hills of Numidia, which clothe themselves twice a year with harvests that rise under the shade of the olive trees; while studs of mag-

nificent courses, pasture at all seasons in the ever-green valleys. We coasted along the shores of Syrtis, where the delicious fruits of Lotos is produced, which, as we are told, makes strangers who eat it to forget their country. We soon came in sight of the sands of Lybia, in the midst of which are situated the enchanted gardens of the Hesperides; as if Nature took delight in making countries the most unproductive to exhibit a contrast with the most fertile. We heard, by night, the roaring of tygers and lions, which came to bathe themselves in the sea; and by the dawning light of *Aurora*, we could perceive them retiring toward the mountains.

But the ferocity of those animals comes not up to that of the men who inhabit that region of the globe. Some of them immolate their children to *Saturn;* others bury their women alive in the tombs of their husbands. There are some who, on the death of their king, cut the throats of all who served them when alive. Others endeavor to allure strangers to their shores, that they may devour them. We had, one day, nearly fallen a prey to those abominable men eaters; for while we were ashore, and peaceably exchanging with them some tin and iron, for different sorts of the excellent fruits which their country produces, they had contrived an ambush to intercept our getting on board, which with no small difficulty

we escaped. After running such a dreadful risk, we durst not venture again to disembark on such inhospitable shores, which Nature has to no purpose placed under a sky so serene.

I was so irritated at the cross accidents of an expedition undertaken for the service of mankind, and especially at this last instance of perfidy, that I said to *Cephas*, "The whole earth, I believe, Egypt excepted, is peopled with barbarians. I am persuaded that absurd opinions, inhuman religions, and ferocious manners, are the natural portion of all nations; and it is, undoubtedly, the will of *Jupiter*, that they should be for ever abandoned to these; for he has subdivided them by so many different languages, that the most beneficent of mankind, so far from having it in his power to reform them, is not capable of so much as making himself understood by them."

Cephas thus replied: "Let us not accuse *Jupiter* of the ills which infest mankind. The human mind is so contracted, that though we sometimes feel ourselves much incommoded, it is impossible for us to imagine how we could mend our condition. If we remove a single one of the natural evils of which we so bitterly complain, we should behold starting up out of its absence, a thousand other evils of much more dangerous consequence. Nations do not understand each other; this you alledge, is an evil: But if all spake the same

language, the impostures, the errors, the prejudices, the cruel opinions peculiar to each nation, would be diffused all over the earth. The general confusion which is now in the words, would in that case, be in the thoughts." He pointed to a bunch of grapes: "*Jupiter*," said he, "has divided the human race into various languages, as he has divided that cluster into various berries, containing a great number of seeds, that if one part of these seeds should become a prey to corruption, the other might be preserved.

"*Jupiter* has divided the languages of men, only for this end, that they might always be enabled to understand that of Nature. Nature universally speaks to their heart, illumines reason, and discloses happiness to them, in a mutual commerce of kind offices. The passions of mankind, on the contrary, as universally, corrupt their hearts, darken their understanding, generate hatreds, wars, discords, and superstitions, by disclosing happiness to them only in their personal interest, and in the depression of another.

"The division of languages prevents these particular evils from becoming universal; and if they are permanent in a nation, it is because there are ambitious corps who make an advantage of them; for error and vice are foreign to man. It is the office of virtue to destroy those evils. Were it not for vice, there would be little room for th

exercise of virtue on the earth. You are on your way to visit the Greeks. If what is said of them be true, you will find in their manners a politeness and an elegance which will delight you. Nothing should be comparable to the virtue of their heroes, having passed through the test of long and severe calamities."

All I had hitherto experienced of the barbarism of nations, stimulated the ardor which I felt to reach Argos, and to see the mighty *Agamemnon* happy in the midst of his family. By this time we descried the cape of Tenarus, and had almost doubled it, when a furious gale of wind, blowing from the coast of Africa, drove us upon the Strophades. We perceived the sea breaking against the rocks which surround those Islands. Sometimes, as the billows retired, we had a view of their cavernous foundations: Anon, swelling again, the surge covered them, tremendously roaring, with a vast sheet of foam. Nevertheless, our mariners persevered, in defiance of the tempest, in attempting to make cape Tenarus, when a violent gust of wind tore our sails to pieces. Upon this, we were reduced to the necessity of stopping short at Steniclaros.

From this port, we took the road, resolving to travel to Argos by land. It was on our way to this residence of the king of kings, my good shepherd, that we had the good fortune to meet

with you. At present, we feel an inclination to accompany you to Mount Lyceum, for the purpose of beholding the assembly of a people, whose shepherds display manners so hospitable and so polite. As he pronounced these last words, *Amasis* looked at *Cephas*, who expressed his approbation of them by an inclination of the head.

Tirteus said to *Amasis*. "My son, your relation has deeply affected us: of this you have had a proof in the tears which we have shed. The Arcadians once were more miserable than the Gauls. We shall never forget the reign of *Lycaon*, formerly changed into a wolf, as a punishment of his cruelty. But this subject would, circumstanced as we now are, carry us too far. I give thanks to *Jupiter*, for having disposed you, as well as your friend, to pass the approaching day with us on Mount Lyceum. You will there behold no palace, no imperial city; but still less will you see savages and Druids: You will behold enamelled verdure, groves, brooks, and shepherds vying with each other in giving you cordial welcome. May heaven incline you to make a longer abode among us! You will meet to-morrow, at the feast of *Jupiter*, multitudes of men from all parts of Greece, and Arcadians much better informed than I am, who

are undoubtedly acquainted with the city of Argos. For my own part, I frankly acknowledge, I never heard mention made either of the siege of Troy, nor of the glory of *Agamemnon*, celebrated, as you tell me, over all the earth. I have employed my whole life in promoting the happiness of my family, and that of my neighbors. I have no knowledge except of meadows and flocks. I never extended my curiosity beyond the limits of my own country. Your's, which has carried you, so early in life, into the heart of foreign nations, is worthy of a God, or of a king."

Upon this, *Tirteus* turning to his daughter, said to her, "*Cyanea*, bring hither the cup of *Hercules*." *Cyanea* immediately arose, hastened to fetch it, and, with a smile, presented it to her father, *Tirteus* replenished it with wine; then, addressing himself to the two strangers, said, "*Hercules*, like you, my dear guests, was a great traveller. Into this hut he deigned to enter; here he reposed, while he was pursuing, for a year together, the brazen footed hind of Mount *Erimanthus*. Out of this cup he drank: You are worthy of drinking from it after him. I use it only on high festivals, and never present it to any but my friends. No stranger ever drank from it before." He said, and tendered the cup to *Cephas*. It was made of the wood of the

beech tree, and held a *cyathus* of wine. *Hercules* emptied it at a single draught; but *Cephas*, *Amasis*, and *Tirteus*, could hardly master it, by drinking twice round.

Tirteus afterwards conducted his guests to an adjoining chamber. It was lighted by a window, shut by a texture of rushes, through the interstices of which might be perceived, by the lustre of the moon, in the plain below, the islands of Alpheus. There were in this chamber two excellent beds, with coverlets of a warm and light wool. Then *Tirteus* took leave of his guests, wishing that *Morpheus* might pour the balm of his gentlest poppy upon their eyelids.

As soon as *Amasis* was left alone with *Cephas*, he spake with transports of delight, of the tranquility of this valley, of the goodness of this shepherd, of the sensibility and the graces of his youthful daughter, to whom he had never seen any thing once to be compared, and of the pleasure which he promised himself the next day, at the feast of *Jupiter*, in beholding a whole people as happy as this sequestered family. Conversation so delightful might have sweetened the remainder of the night, to both the one and the other, fatigued as they were with travelling, without the aid of sleep, had they not been invited to repose, by the mild light of the moon,

shining through the window, by the murmuring of the wind in the foliage of the poplars, and by the distant noise of the Achelöus, the source of which precipitates itself, roaring, from the summit of Mount Lyceum.

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